

5-1-1976

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Special Libraries Association, "Special Libraries, May-June 1976" (1976). *Special Libraries, 1976*. Book 5.
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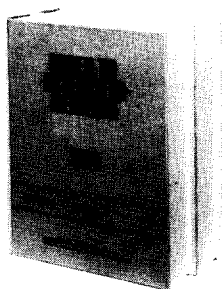
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May/June 1976, vol. 67, nos. 5/6

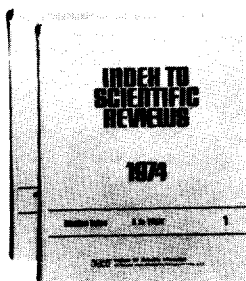
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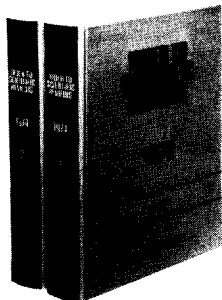
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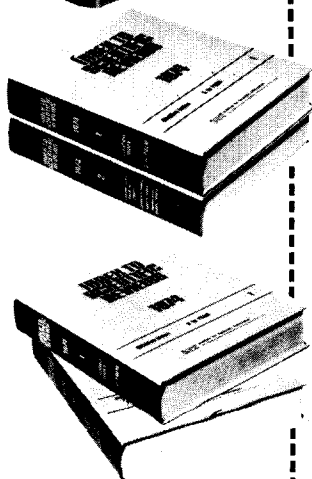


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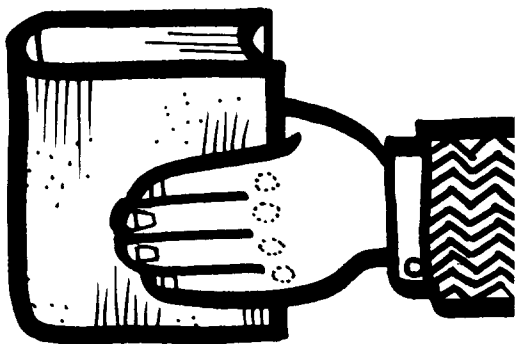
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LETTERS

Explanation, Please

Concerning Jerome Fatcher's article in *Special Libraries* 66(nos.5/6):245-251 (May/June 1975), the following points deserve clarification.

1) *Table 1, questions 1, 2, and 6*: Considering that the survey questions were asked during interviews, it is surprising that less than 50% of the user sample responded to these three questions. The author does not provide an explanation. The low level of response to questions 1, 2, and 6 tends to diminish the reliability of the results as accurate measures of user attitudes; this is particularly true of the results reported for question 2 in the non-director category.

2) *Computer service (p.249)*: In the text 18 people were reported to have received output from at least one computer service, yet in Table 1 only 14 people were reported to have responded to the question about computer service. Is this discrepancy merely a typographic error?

3) *Recommendation against introduction of SDI services (p. 251)*: Although user response to the SDI proposal seemingly justifies this recommendation, a comparison of question 1 to question 7 (SDI) underscores the contradictory user responses to these two questions. The monthly bibliographies, produced by the library's information services department, serve the same function, i.e., a current awareness function, as a more personalized SDI service. Accepting for the moment the validity of the results of question 1, 93% of the user sample approved of this service; indeed the author recommends that the scope, coverage, frequency, and use of these bibliographies be increased. Thus, it seems that the library has offered and continues to offer a service similar to SDI; the user sample has used and continues to use this service for current awareness purposes and overwhelmingly approves of the service; yet the same user sample rejects the proposal to introduce SDI services into the library. This inconsistency in user response to these two related questions should be weighed before the recommendation is accepted that SDI services should not be introduced. Perhaps the survey question specified one kind of SDI service which the user sample rejected; however, if so, this was not explained in the article.

4) *Conclusion that the library is viewed as a passive information source (p. 251)*: The author states that "37% of the people who had recently done a literature search chose to do it themselves," which, along with other findings,

suggests "that the users view the library as a place which should not be expected to actively assist in information gathering" (p. 250). However, by what available means did the remaining 63% of this user group complete their literature searches—through the assistance of the library staff or computer services? If so, would this finding suggest that these users view the library as an active agent in the information gathering process? It seems that the library has played an active role in the users' information activities as evidenced by the production of monthly bibliographies, computer assisted searches, and customized bibliographies. Therefore, perhaps it is more accurate to infer from the results of the survey that the users do not accurately perceive the role of the library in gathering information. If so, then the library also should concentrate upon a user education program as well as the other recommendations.

Steven Leach
Technological Institute Library
Northwestern University
Evanston, Ill. 60201

Reply

I would like to thank Steven Leach for having read my article so carefully and for taking the time to comment. My replies are in order corresponding to his comments.

1) The low number of responses to questions 1 (monthly bibliographies), 2 (computer services), and 6 (microform) was because the respondents were first asked if they were aware of (or had ever used) these services. Only when it was determined that they had some knowledge of them were the respondents questioned about their usefulness. It was this low level of awareness of these services (i.e., monthly bibliographies and computer information services) which prompted the recommendation that efforts be made to increase user awareness. As to the reliability of the responses, there is always a chance that they may be in question especially if the sample is not truly representative of the whole population (1). However, as explained on page 247, there was a check made to support the contention that the sample was representative.

2) There is an error here. The correct number is 18. The remainder of data in that block on table 1 remains the same.

3) Neither Leach nor I have accurately defined SDI but apparently we do not agree. I used SDI to mean the most personalized type of alerting service as described by L. J. Strauss, et al. in the following. "Profiles of personal interests are compounded by selecting

relevant terms from a thesaurus, and only those facts that fit these choices are brought to attention" (2). The monthly bibliographies do not fit this definition for they are broad in scope with each covering one drug (or group of drugs). They are a current awareness service not SDI. There is then no real inconsistency in user response. My apologies for using a term which I assumed had a generally accepted meaning.

4) It is not my intention to imply that the library is not trying to serve its users. But when SDI is rejected, when the majority of the sample is unaware of some of the services offered, and when one out of three people does his own literature searching, the users are not utilizing the library fully. I believe that this can be interpreted to mean that the library is perceived as a relatively passive source. I am of the opinion, as Leach obviously is, that the proper role of the library is to fully serve all its user group. His suggestion of a user education program is one good means of accomplishing this. However, *first* the library must decide if it wants to (or can) do this. It is conceivable that the library would decide not to because of personnel or financial constraints.

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1. Slonim, Morris James / *Sampling in a Nutshell*. New York, Simon and Schuster, 1960, p.7.
2. Strauss, Lucille J. et. al. / *Scientific and Technical Libraries: Their Organization and Administration*. 2d ed. New York, Interscience-Wiley, 1964, p.239-240.

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1. Education
2. SLA's role as a leader in the community
3. Librarianship
4. Administration of SLA

We need to establish some priorities which should guide us in our planning and budgeting for the next few years. In a way, this is difficult because this Board cannot be sure that its priorities will be the same as those of future Boards. However, we can lay down some guidelines. Continuing education is the first

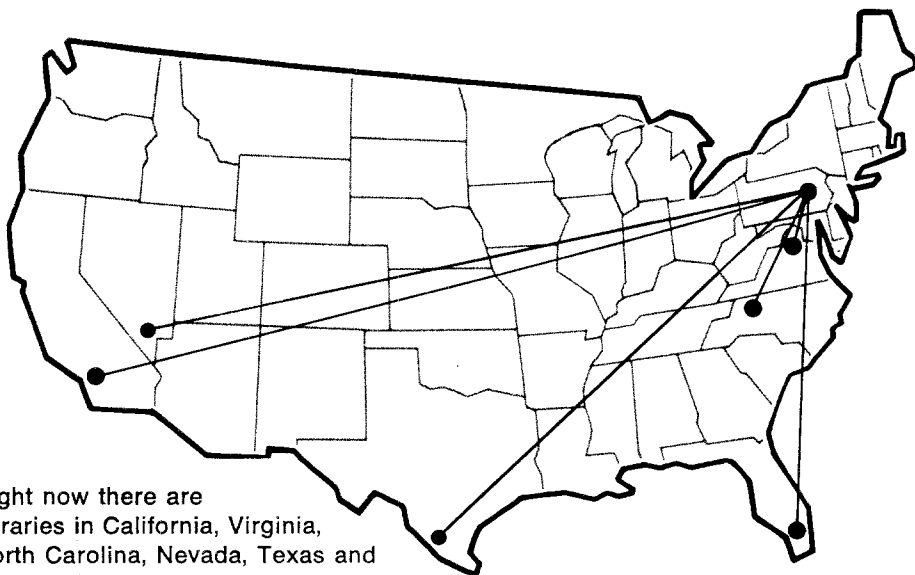
priority of the Board. We hope next year to be able to employ an Education Coordinator at the Association office who will plan and run continuing education workshops, seminars, and courses, not only once a year in connection with our annual Conference, but in many centers throughout the year. A Committee has been set up, chaired by Joseph Dagnese, to study the role of this person and to report to the Board in June. Once this program gets going, we hope that it will be self-financing so that we can turn our attention and our funds to further matters.

I would be happy to hear from concerned members of the Association about what they think should be our priorities. Remember that anything we do is going to cost us money and that money is not unlimited. We must decide which worthwhile projects are most needed. Let me ask you some questions. Should we be trying to project a higher profile in the community? We have been very active in the efforts to mitigate constraints in libraries in the proposed revision of the copyright bill. Should we be involved in other legislative issues? Should we try to improve the image of our members? What about our salaries? Should we be trying to improve the status of minority groups working in special libraries? What about the position of women? Should we be more involved in the international library field? We have begun to make ourselves felt in IFLA. Should we continue this effort? There are no costs to SLA in its IFLA activities other than the annual dues. Should we involve ourselves in research? Good research is expensive. Can we divert enough funds to this to make it worthwhile?

Every member of SLA has a right to have a voice in the plans of the future of the Association. Please let us hear what you think.

Miriam H. Tees
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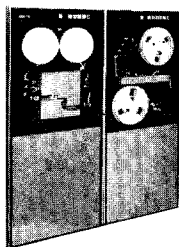
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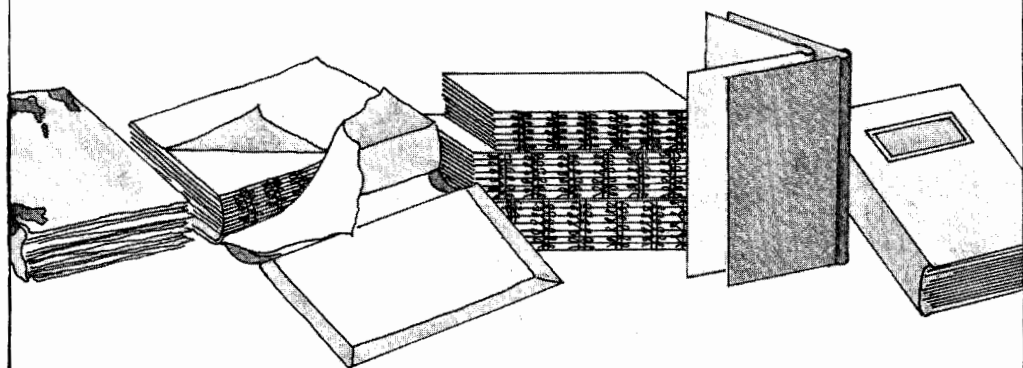


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The One-Person Library:

An Essay on Essentials

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■ A one-person library is one in which all of the work is done by the librarian. The keys to success in a one-person library are effective self-management and good communications between the librarian, his

clientele, and management. Lack of pressure and direct appreciation for the librarian's professional efforts are described as the primary rewards for working in a one-person library.

A ONE-PERSON LIBRARY may be defined as one in which *all* the work is done by the librarian. There may be occasional help in the form of temporary assistance from another department in the organization for one particular project at a time, but such assistance is not a part of the library operation. In a one-person library, there is no distinction between clerical and professional duties; management is not involved in policy-making in the library; and the librarian, in terms of the actual operations of the library, is answerable only to himself (management, of course, supervises such personnel considerations as when the librarian works, salary, vacation, etc.).

This definition may seem obvious to many professional librarians. It is surprising how often, though, in discussing a one-person library situation, many librarians, especially new librarians interviewing for positions, assume that certain functions are done by someone else in the organization. This is dangerous and can lead to disappointment in the position. A good rule of thumb to remember is this: if an

organization is small enough to have a library operation staffed by only one person, it will probably be an organization in which the library is not considered to be one of the vital functions in the organization. Consequently, activities in the library will not be high on the organization's list of priorities, and the librarian should expect little or no help from other operations in the organization. There are, happily, exceptions to this rule, and some one-person librarians do work for supportive organizations.

Second, the paper is an attempt to share some general ideas on the subject of one-person librarianship. The author's opinions are the result of several years of observing and discussing, informally, the problems and pleasures of the one-person library.

Third, the paper is intended to offer encouragement and support to librarians who now work in one-person operations. It is not always easy, despite the rewards, to work alone, and the mere fact that other librarians are in similar positions might be of value to some.

Self-Management

The list of duties is enormous in a one-person library. Not only is the librarian responsible for the full range of professional duties, such as readers' advisory, answering reference questions, selecting and ordering materials, cataloging and classification, weeding and similar tasks but he must fit into his schedule clerical duties as well, including typing, filing, circulation counts, shelving and such. Even occasional custodial duties such as cleaning shelves or shifting books are often done by the librarian, who quickly learns that the fastest way to get something done is to do it himself. To do *all* these jobs and to do them well requires a level of self-management that none of us are taught in graduate school and few of us learn even later. It is easy to say we can manage our time, especially if we are part of a staff and duties are defined; but it is difficult to do it when everything must be done by one person. There are no rules imposed by management, there are no time-sheets, there are no supervisors looking over one's shoulders.

The key to self-management is to establish priorities. There are certain jobs in every library which must be dutifully performed; otherwise a backlog appears and what has been a daily routine can quickly become a monumental project. So the first rule of self-management in a one-person library is obvious: get the house-keeping done first, do it early each day and get it out of the way. The librarian who skips his circulation count on Monday morning will find himself with twice as much to count on Tuesday, and he will have reduced the rest of Monday's efficiency by worrying about not having done it.

A second rule continues the establishment of priorities: in one's professional duties, concentrate the effort on those activities which call for immediate action. Of course, the choice is obvious if one is deciding between answering a reference inquiry or working on the index of the organization's archives. The librarian must answer the inquiry first. However, he will be aware that the index, even if it does not

produce an immediate response, is a valid professional activity and will try to find some time each day for precisely this kind of work. This choice is easy; it is more difficult when the librarian must choose between two equally "essential" tasks. This is where one's professionalism is called upon. The librarian's experience and background will enable him to establish proper professional priorities.

In all libraries, there are professional duties which call for an immediate response, such as readers' advisory and reference. However, many tasks in a library are not so pressing, but these projects, upon completion, will enable the librarian to carry out the library's immediate operations more successfully. These are valid professional activities and the librarian should be aware of them, of their demands on his time, and their eventual contribution to the library operation. He does not need to apologize for such activities, and even if they are so esoteric that only the librarian will use them and know about them, they are, nevertheless, part of his job and he should feel free to plan time for such activities. The library's service will be better for it.

Professional Affirmation

The librarian in a one-person library has another problem other librarians do not have: because he works alone, his professional self-worth is often neglected. He is a professional; he has been specially trained to do the work he does. Yet because of the circumstances of his job, he does not interact with other professionals and, of course, the library's clients and the other employees of the organization do not think in terms of these distinctions. Thus, if the librarian is to carry out his duties successfully, his professional affirmation must come from inside himself. It will, if he follows a third rule: Always think of yourself as a professional, even when performing nonprofessional tasks.

In speaking of professional and non-professional roles, it is easy to lapse into semantics. The terms have been defined and redefined, so it is not necessary to go into those details here. Yet there is one

distinction which might be appropriate: the nonprofessional works a set number of hours, but a professional, generally speaking, works on a particular job, and works until the job is done. This is not to say that a professional does not work set hours. Of course he does, but his concern is more with the project or piece of work itself than the hours he is on the job.

In the one-person library, it is essential that the librarian be aware of the distinction and think of himself as a professional. He needs it for his own professional affirmation and also to keep the level of service where it should be. Even when doing clerical tasks, he must think of himself as a professional doing clerical work, not as a clerk working in a library.

Say "No"

Another self-management rule which must be observed is to learn to say "no." For many persons, and for librarians especially, since we have been trained to work in a service profession, it is almost impossible to refuse to do a task, but there simply are not enough hours in the day to do all the things your clients and management would have you do. The librarian who has a supportive manager can, with the knowledge that management will back him up, say no to requests that are not in his realm of service. There is no way, however, to convince clients and other employees that the librarian has anything to do but sit and wait for questions. The librarian has to learn to do only those services for clients normally provided by the library, and work outside that limit is handled with a firm but pleasant "no" and, if possible, referral to an appropriate agency where the work can be done. As for other employees (those who are not clients, usually secretarial or clerical workers), it may sound elitist, but the librarian should not even bother to waste his time trying to educate them. No amount of effort, however well-intentioned, will convince them that the librarian does not spend all his time sitting and reading. The best way to deal with this problem is simply a firm, but again polite, refusal when they come to the library to

visit, gossip, kill time, or even to ask the librarian to do their son's or daughter's research assignments. The other employees will soon get the message, and while the librarian will not be the most popular person in the organization, he will, at least, not lose time dealing with inappropriate situations. The ability to say no is an asset, tremendously difficult to achieve, but important if one is to provide good library service.

Restrict Personal Work

In a one-person library it is particularly important not to be tempted to use library time for personal work. It is easy to forget, in a quiet time when the mail has been done and there is no one waiting to be helped, that one is an employee and not on one's free time. Such activities as personal letter writing, bill-paying, telephone conversations and such can be tempting; but must be avoided.

Most one-person librarians solve the problem of personal tasks by working flexible hours, that is, being on duty the hours they are required to be there, but also frequently coming in early or staying later—or coming in on an occasional Saturday—to do those things which cannot be classed as "job" but which are better done at the office than elsewhere. This is particularly true of work for professional organizations. Most joiners who want to contribute to a professional organization cannot find time during their work days. They are able to do something for the professional organization by putting in time at the office after hours.

Communication

No less important than self-management is communication between the librarian, his clientele, and his management. Communication demonstrates how good the library's operations are. And oddly enough, it is the librarian who is in the position of initiating the communication, in the unique position of telling how good his work is. It is a position that persons in other professions might justifiably envy.

Communication is important in any service organization, and all libraries employ some form of communication or public relations, either overtly or not, but for the librarian in a one-person library, it is basic. It is the one way of affirming the importance of the library to the organization, and it is the librarian's means of evaluating his own professional worth. Just as no one is going to use a library he never hears about, so no one is going to value the librarian if no one knows what he is doing.

To reach management, one universally utilized form is the annual report, and whether it is a ten-page printed and bound booklet or a one-paragraph heading over some statistics, the annual report is probably the single most important document the one-person librarian will give to management all year long. It is the statement which reflects the policies of the library, the accomplishments of the year, and significantly, goals for the future. It tells management what the librarian sees as problems and where the strengths of the library, as reflected by use, are to be found. Finally, it is the annual report which gives management a tool to effect changes, to build strengths and to eliminate weaknesses in the library operation, for with a well-written and documented annual report the librarian can, through management, seek these goals from the executive level. It is easy to underestimate the value of the annual report, to dismiss it as a bothersome once-a-year chore, but for the alert and dynamic librarian who runs a library without help, it can be his most important task of the year.

Frequent briefings by the librarian to management are also successful methods of communication. Management is concerned with all operations in an organization, and the library admittedly is not high on the managerial list of necessary departments. However, a good librarian and a good manager will soon find that this does not have to be a problem. In a one-person library, it is up to the librarian to sell the library, and he does this by first convincing management that the library's services are needed and appreciated. A good manager does not want to get in-

involved in library operations—indeed, that is why he has hired a professional librarian and he will prefer that the librarian run the library—but he does want to know what is going on. A daily briefing, or certainly no less than once every two or three days, is invaluable to the manager to give him a general picture of what the librarian is doing. The briefing does not have to be formal, nor a long and involved lecture. It is necessary, however, for the librarian to spend some time with the manager, letting him know who uses the library, what interesting or useful questions are asked, etc. The librarian will soon learn that these briefings are useful for more than general information. As he deals frankly and openly with his manager about problems, special circumstances, policy, etc., the manager is getting input about the value of the librarian and his work to the organization, input which is certainly advantageous to the librarian if he is doing a good job.

Another valuable communication format is the written memorandum. In most organizations the manager keeps a file of current activities in the library, and as long as he is not flooded with trivia, he will be pleased to have a written memo about certain projects, programs, etc. The written memo also serves the purpose of informing management when a face-to-face briefing is not possible. Because of heavy demands on their time, a manager might not be able to meet with the librarian as often as he would like, and a written memo insures that the information is conveyed.

The librarian should also share with management some of the complimentary letters he receives from satisfied clients, since this is as important to management as the work done for the client. Letters about special projects which involved special effort should be seen by the librarian's manager. It is all part of an overall picture that the librarian needs to present, to show that the library and its services are being used by the clients, and used to such an extent that a special letter was written.

Of course, the best communication and the best public relations for management and for clients is the attitude of the li-

brarian. In a one-person library, a pleasant attitude is essential, because the librarian is the only one who is dealing with the client or the manager, and it is he who will effect a pleasant or unpleasant reaction. The librarian in a one-person library needs to like his work, even needs to be enthusiastic about it from time to time. If this attitude is conveyed, his success in his position will be generally assured.

For the library's clients, there are several communications tools which are effective and which will bring users into the library. Again, an annual report can be the most useful of all, if it is well-constructed and attractively presented. The clients of the library are entitled to know what the policies, services, and goals of the library are as well as management. While the report might have different emphases for the clientele from that for management, it should be printed and distributed. Many one-person librarians, however, find that one annual report can serve both needs, with perhaps some special annotations for the version given to management.

Other communications tools are received by clients with varying degrees of success. Newsletters, with information about the organization as well as the library, are always popular, and especially popular are printed descriptions of work by clients based on research or study in the library. Booklists, too, are read by clients, and whether they are annotated or not, they are valuable because they keep the image of the library before the clients, and the clients have a feeling of knowing what is available in the library, even if they are not immediately going to avail themselves of the materials offered.

Again, in dealing with clients as with management, attitude means much. The librarian who makes clients feel that their inquiries are welcome will find people attracted to use his facility. In the final analysis, good service is the best form of communication. No amount of covering up will hide a librarian's lack of proficiency, so it is essential that the librarian stay on top of his profession, read professional literature, attend meetings of his professional associations, and interact

with other librarians, so that he will not become stale and allow the service in his library to suffer. In no place is it easier to grow stale, to become complacent, than in a one-person library. Librarians working with other librarians have external stimulation, but for librarians working alone, it is easy to let professional service slide, to get bogged down in day-to-day routine tasks. If the professional tasks slow down and the librarian finds himself bored, he must create something. Index the organization's archives, if that is something that needs to be done, or spend some time weeding a section that has been postponed for years. The librarian can create his own professional stimulation, and the library and its services will be better for it, even if he is the only one who knows it.

Rewards of the One-Person Library

If there are so many problems in working in a one-person library, if there are so many professional and, possibly personal inconsistencies, why would anyone do it? Why would anyone, trained for a service profession, want to work alone, where the opportunities for professional service are obviously limited, where there is absolutely no possibility of professional advancement within the organization, and where, quite frankly, if he is not actively aware and not fighting against it constantly, he can get lost in a morass of clerical and other nonprofessional detail? There are two reasons; both of them have more to do with the personality of the librarian than with the theoretical service orientation received in graduate school. First, there is definitely a lack of pressure. For the librarian in a one-person library who does a good job, there is little of the harassing and political maneuvering that characterizes many library positions. There is pressure, of course, but it is of an internal nature, of a desire to do a good job and to keep up the good work. His library is his own little world, and as long as he does a good job, is competent and keeps his clients satisfied, he can be professionally happy without pressure.

The second reason, of course, is appreciation. In the one-person library, there is

an immediate interaction between the client and the librarian, and even if the librarian is unable to finish the project and has to refer the client elsewhere, the client is appreciative and will usually say so, either to the librarian or to his manager (and frequently to both). The one-person library is a good place to work if a librarian wants to be appreciated and to see the results of his work.

Certainly not everyone will enjoy working in a one-person library. It is a special world, one that might be alien to an

academic intellectual, or to a skillful administrator, or even to a librarian who wants to make a significant societal contribution. Yet for those who choose it, the tight-knit and pleasantly rewarding world of the one-person library has its advantages that, in the final analysis, far outweigh its problems.

Received for review Sep 9, 1975. Manuscript accepted for publication Dec 1, 1975.



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An Academic Science/Engineering Library's Experience with a New York Loan Network

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■ New York State's loan networks play an important role in screening and routing requests to the closest feasible libraries. The State University at Buffalo Science and Engineering Library's experience attests to the value of regional hierarchical borrowing patterns in keeping turnaround time to a minimum and distributing the loan burden equitably.

SOME CALL IT "NYSILL," some call it "NYSILL" (Nisill) but students, faculty and other members of the research community in the Empire State hail it as their access to some of the best research collections in the state. "NYSILL" is the acronym for New York State Interlibrary Loan, a network composed of three area referral libraries—Brooklyn Public Library, Rochester Public Library and Buffalo and Erie County Public Library—and nine subject referral libraries—those of the American Museum of Natural History, Columbia University, Cornell University, Engineering Societies, New York Academy of Medicine, New York Public Research Libraries, New York University, Teachers College, and Union Theological Seminary.

Relatively little has been written about NYSILL. Studies of the network have been made by Nelson Associates, Inc., of Washington, D.C., and copies of their

reports are in many libraries. Most of the articles about the network have appeared in the *Bookmark*, a publication of the New York State Library. However, NYSILL statistics have been used in an article on an interlibrary loan study by Dr. Rolland Stevens of the University of Illinois in the September 1974 issue of *College and Research Libraries*. Nothing written from the user's experience was found.

Operation Patterns

Established in 1967, NYSILL is an example of the feasibility of hierarchical borrowing patterns and the advantages for both lender and borrower of the hierarchical concept: Why borrow across the state if you can find it across the street? Every library is expected to make the fullest use of local and regional resources before sending interlibrary loan requests to the State Library for referral into the NYSILL network. Getting material as close to home as possible obviously saves delivery time. Moreover, it saves time for the large libraries that might be overburdened with requests were it not for the network's part in screening requests and routing them to the closest source. Of course, a major portion of the requests from clientele could be satisfied by the Engineering Societies Library, but instead of overloading that library with all requests for engineering materials, local resources are tried first, requesting from the Western New York Library Re-

sources Council whose headquarters are in the Buffalo and Erie County Public Library.

The Western New York Library Resources Council is one of nine Reference and Research Library Resources Systems (3R's) in the state. In 1967 the regional reference and research library systems were organized, and each is autonomous in its operation. The committee appointed by the State's Commissioner of Education was convinced that the establishment of regional systems rather than one comprehensive statewide system would offer the best method for serving the research needs of students and researchers. Many of the academic institutions and industries of the Western New York area are members of the Western New York Library Resources Council, and each pays a modest annual membership fee. Services available include interlibrary loan, delivery, and borrowing privileges among member libraries. The latter is known as LAP (Library Access Program)—which permits members to issue identification cards to their staff to provide access, including direct borrowing of library materials from other member libraries. This direct access extends the loan system to research personnel who are seeking more than specific titles, i.e., the privilege of using the facilities of academic and special libraries. The council has made every effort to keep the clerical work connected with this access as simple as possible without sacrificing the security of collections.

NYSILL is the major statewide program of the overall 3R's program. The commissioner's committee recommended building on existing major collections, and stated that the State Library should serve as a back-stopping resource. The statewide NYSILL program employs computer technology for most of its operational details. Each phase of its automation development has improved the operation of the program and permitted continued annual volume growth without major staff increases. In October 1974 a new phase of NYSILL automation was initiated: NYSILL transmission sites began communicating directly with the computer when submitting requests to the

NYSILL network. The aim is to expedite service by further automating the collection, storing, sorting and listing request citations; putting requests into the referral network and transmitting reports back to the requesting sites. Transmission sites having teletype or DataPhone service are called daily on a schedule basis by the computer using the New York State Intercity Tie Line System. Transmission sites using teletype on TWX service call the computer at a scheduled time each day. Reports on submitted requests for each transmission site are available when daily requests are submitted.

At Buffalo all regional requests are phoned or teletyped to the Council headquarters where most are routed to the Buffalo and Erie County Public Library or to our University Libraries by the Council staff. After two working days requests not filled in the region are put into the NYSILL network. Materials located in the Western New York area are given to the delivery service (currently United Parcel Service) and sent directly to the libraries originating the requests. Photocopy usually goes via first-class mail.

Ultimately, many of the Science and Engineering Library's requests do reach the Engineering Societies Library, but the State Library as the hub of the network has the responsibility for distributing the loan load as equitably as possible.

By the same token, although the State University of New York at Buffalo has the largest engineering program in the region and the only well-established program in the State University system, the Science and Engineering Library should not be the first resource for all regional loan requests in the areas of science and technology. Requests from other library systems in the state should be channeled from these systems' headquarters to the Western New York Library Resources Council for screening and routing.

While the Buffalo and Erie County Public Library and the Science and Engineering Library at the State University at Buffalo have the two major regional collections in science and technology, special libraries in the Western New York area cover in depth several subject areas;

others have extensive report literature, patents, or foreign language titles. The cooperating special library can be assured that requests for its materials have been screened before routing by the council.

Results

What is the rate of success of NYSILL? Increasingly detailed statistics have been gathered on Science and Engineering Library's interlibrary loan operation for the past two years. Thus, these percentages give a good picture of its relations with the network:

An average of 70% of the Science and Engineering Library's requests for loans are filled by the regional and statewide networks

An average of 64% of the items for which the Science and Engineering Library is asked are requested via the regional network and of this number 67% are filled.

The fill rate for the NYSILL statewide network as a whole during 1970-1971 was 64%; during 1972-1973, 59%. These were the latest figures available at the time this paper was written.

The report on 1972-1973 statewide operations revealed 56% of the requests were generated by faculty and student; 12% by professional groups and industrial researchers and 32% by the "general public."

The materials received via the network are forwarded to the requestors of the loans without charge—no delivery charge or postage in the case of monographs; no fee in the case of photocopy. This benefit is taken for granted. Unfortunately, when it is necessary to go beyond the boundaries of New York State to satisfy a request, a fee is charged.

Time Lapse

As to turnaround time, the figures kept on requests to the Western New York Library Resources Council and to NYSILL over a two-year period show an average of ten days. These are calendar days, not working days. An average implies a span of time: some items obtained locally come in two to three days; others coming by mail, sixteen to eighteen days. Mail de-

livery is one of the factors that makes the turnaround time unpredictable. The answer is always "ten days to two weeks" to the inevitable question of requestors.

State Library had been processing requests in approximately one and one-half days, but in the 1972-1973 period processing time rose to 2.17 days, due, in part, probably, to a 14% increase in teletype requests. A limit of five days has been set for processing by referral libraries.

The network does have a provision for urgent requests which applies to the university. Requests submitted by college or university faculty members or by researchers in business or industry which carry a reasonable deadline date may be designated "urgent" by the originating library. This is also of benefit to the research-oriented industry in our geographical area.

Requests for urgent items are expedited but a request number which assures recording by the Western New York Library Resources Council is insisted upon. Obviously, the council would prefer that urgent requests be channeled through council headquarters, but appreciates the urgent needs of researchers.

Limitations

Since 1971, due to a growth in volume coupled with a static budget, NYSILL has imposed restrictions on loan materials, none of which seriously affects the research level. In-print materials under \$7.50 and materials indexed in the *Reader's Guide to Periodical Literature* since 1940 are not to be requested. Foreign language requests must indicate that the foreign language version is acceptable to the user.

NYSILL, in 1974, used a six-month pilot program with the Center for Research Libraries to experiment in extending accessibility beyond the state boundaries. It had not been evaluated at the time this paper was prepared.

NYSILL is quite unique in that automation of the network has been an ongoing effort since 1969. It is hoped that NYSILL's success will lead to the development of other loan networks. Its

coordinator, Ms. Jane Rollins, attributes its success to the "zealous staffs of the area and subject referral libraries and the major resources of its component parts."

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Received for review Apr 17, 1975. Revised manuscript accepted for publication Oct 13, 1975. Presented Jun 11, 1975, as a Contributed Paper, during SLA's 66th Annual Conference in Chicago.



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Information Brokers

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■ Individuals using large libraries provide custom services to business. Photocopies, proxy loans, literature searches are the main services. Legitimacy and purpose of free-lance operators are seriously questioned by some and lauded by others. What are the ethics, obligations, and rights of the libraries, the freelancers, and their clients?

IN THE EARLY 1970s there surfaced in the world of libraries and information handling a method of operation that may ultimately have more impact on the profession than its present scope would indicate. This phenomenon is the growing number of independent information brokers who operate primarily as an interface between one or more libraries and paying information users. Their primary purpose is to make a profit.

Many of the users of today's information brokers are special libraries. But most of their clients are firms and individuals who do not have their own special library or do not use it.

This paper is an attempt to explore the problems and opportunities that exist and the ethics that need to be considered concerning the relationships that are developing among: 1) libraries, 2) information brokers, and 3) the clients of either or both.

The study grew out of extensive interviews with several information brokers, the staff of many of the libraries that they use, and industrial and business users of both the libraries and the information brokers.

By means of extensive interviews and conversations or a written questionnaire, 32 more or less viable information brokers have been contacted in the U.S. and Canada. Eighteen of them have made considerable contribution to this effort.

As for how many others there might be, this 32 may be of the same ratio as the tip is to the iceberg. My experience and statements from library staff members and from some of the brokers indicate that many companies have some arrangement with an outside individual that works with that company only. But these individuals are difficult to identify (1).

An Overview

An indication of the recency of this development is Davis's bibliography in which the earliest entry is 1969 (2).

Andrew Garvin, founder of Information Clearing House in New York with its better known subsidiary, FIND/SVP (3,4,5), estimates that the total private sector of information brokers is now a \$5-\$10 million dollar industry and that it will grow to ten times that size in ten years (6).

There are several terms, none totally accurate or satisfactory, which are used to

try to label the group which is the subject of this study. Some of the terms are freelance librarians, information consultants, information specialists, and information-on-demand companies.

One practitioner said at a recent meeting that the designation, "Information-on-demand companies," is not very appropriate because clients do not demand much from them; they beat the bushes for clients (7). Too, information-on-demand is what every library should be ready to provide. One of the features that makes special libraries special is that they are information-on-demand organizations. Gaffner predicts that within ten years every library worthy of the name—special, public, academic—will be operating in an information-on-demand mode (8).

There are at least nine major academic and public libraries which have been operating active information-on-demand services as a regular part of the library for at least seven years. All of them certainly began as far back as the State Technical Services Act of 1965 and are continuing in operation on their own since the demise of that federal program (9,10,11,12).

The designation, "Independent Information Specialist," comes close to identifying the individual practitioner if not the service, except for one factor which is the source of many complaints and much friction: Some of the practitioners are not actually information specialists.

The term information broker (one who collects a fee for acting as an intermediary) will be used here as more nearly adequate to describe a service that they all have in common. However, this term incompletely describes most of the practitioners who bring considerably more professionalism and intellect to bear on their work than the simple transmission of information from one point to another.

The search for identity is also illustrated by the names under which the services operate. Note the permutations and combinations in their names of a group of common keywords: INFORM, Information Access, Information for Business, Information Specialists, Inc., Information Unlimited, International In-

formation Service, Library and Information Service, Library Reports & Research Service, Inc., reference, FIND/SVP, Editec, Inc., Document Transmission, Data Search Company, B.I. Associates, Telico.

Four recent articles (13,14,15,16) give detailed descriptions of the activities of different brokers. Here it will be sufficient to describe the various types briefly in order to establish the limits of the discussion.

How They Operate

The simplest operation of the information broker is the single function of document delivery. The broker uses bibliographic expertise and bibliographic tools (his own or someone else's) to locate and obtain an original, or copy, of an item and deliver it to a user. Some brokers limit themselves to the use of a single large library, more frequently a university library. Others make use of any information resource accessible to them in a large metropolitan area. Some deal exclusively with government documents. They differ from the wholesalers and jobbers who must maintain massive operations within allowable discounts. These brokers deal in small quantities, usually single copies of an item; offer rapid, custom service; and charge a fee for their services above their cost for the document and out-of-pocket expenses. These document deliverers may be individuals operating independently, individuals working under the auspices of a large company in another sector of the information industry, or they may be a group of independent operators who are pooling their resources of time, know-how, and mobility.

At the other extreme are individuals, partnerships, and formally organized small corporations which undertake any project or assignment in the general field of information services. Many of these services go far beyond traditional library services—even far beyond services offered the most advanced special libraries. Some of the known services offered are document delivery (purchase, photocopy, or proxy loan); preparation of bibliographies;

literature searches, manual and computerized; state-of-the-art reviews; handbook preparation; translations; library organization, development, and collection maintenance; information systems development, technical writing and editing; data collection and interpretation; location and referral to experts; assistance in the selection and hiring of library and information personnel; speech writing; indexing.

Paralleling the variety and scope of services offered by different brokers is the amount of involvement they have in their work. It is possible to work profitably as an independent information broker having made little or no investment in the business except for out-of-pocket expenses.

How They Began

Some brokers began in simple opportunistic situations. For instance, one began a document delivery service as a means of adding to the family income at least long enough to help put a child through college. Another started a business as a moonlighting operation while employed as an industrial special librarian. Other individuals have been identified as doing literature searches on a moonlighting basis while employed in an academic library which operated an information-on-demand service to off-campus users.

Others have started into the business in a more forthright and direct manner after considerable thought and planning and, in some cases, with considerable investment and a willingness to take some risk.

One partnership began as the way out of a state of unemployment in an area oversupplied with trained librarians. At the time the librarian of the partnership could not locate a professional position, and the spouse of the other partner was suddenly out of work.

Another organization developed out of an acquaintance that began in graduate library school. By graduation the two students had decided to set up their own business in the information field and have gone on to a quite successful undertaking (13).

Some of the more aggressive information brokerage companies were not started by professional librarians. These companies tend to develop more specialized data bases in-house, to have made sizeable capital investments, and to have large staffs. Partly because of their size, visibility, and aggressiveness, and partly because of their use of untrained individuals, they also tend to be more frequently criticized by others in the library and information field.

Three issues need to be resolved, or at least considered, in the proper operation of the information broker in the information network: 1) conflict of interest, 2) fees to be charged and fees to be paid, and 3) the representation of someone else's work and expertise as one's own.

Conflict of Interest

Conflict of interest is the least difficult of these problems to face, but the possibility does exist. In some cases the brokers themselves can be suspect of not being clear of conflict of interest. Examples are the industrial librarian who was moonlighting as a free lancer and the literature searcher working privately on the side instead of through the employer's literature search service.

In other cases the brokers may be encouraging conflict of interest problems in others. Some brokers maintain liaison with staff members at libraries who provide photocopies or loans from those libraries for the information broker. There are at least two possibilities for less than satisfactory activities: 1) the staff member may not limit the work provided to the broker to time outside the staff member's working hours, and 2) the staff member may pass along special privileges to the broker and his client in the way of reduced photocopy fees, special loan privileges, or other special treatment not generally available to outsiders.

Fees

Since De Gennaro and others (17,22) cover the general topic of user fees for libraries and information services, these re-

marks will be limited to the fees paid by and to the information broker, specifically.

Many academic libraries charge outsiders a fee for borrowing privileges. When the broker, acting as agent for a number of companies, provides all those companies with the needed access to the library's collection by paying only one fee, the broker is depriving the library of some income and at the same time putting an additional burden on the library.

Especially in the public libraries there may be resentment because the broker is charging a fee for something that the client could have obtained free if the client had contacted the library directly. The broker's response, of course, is that the client is paying for information that he did not have: the client did not know to contact the public library directly. It is not the broker's fault that the client did not know where to go to get the information free. But is it proper for the broker to withhold that knowledge from his client? Many of the sample search questions on the brokers' advertising lists would have been answered without cost by the reference department of the public library in any medium-sized city.

Many of the brokers list private corporate libraries and privately supported special libraries among the resource centers they use. The spirit of special librarianship is built upon the willingness to cooperate in depth with other librarians with almost no questions asked. But many of these special libraries, as indeed many public libraries and many academic libraries, depend upon broad industrial support in order to maintain their collections and offer special services. Can one really expect the staff and administrators of these libraries to be happy when potential supporters are charged a fee for resources of a library when none, or very little, of the fees accrue to the library?

Misrepresentation

Another criticism of some of the brokers is lack of know-how or the selling of someone else's know-how or someone else's work as their own. Many cases were

reported of individuals obtaining considerable reference assistance (not just directional guidance) from the professional staff of a library, and then charging a client a consultant-type fee for providing the information. The truth is that if the individual had not received help from the reference staff he might never have found the information.

As indicated earlier, some of the brokers are not information specialists. The reference librarians and the public service staff of some of the libraries they use are the real specialists. The fact that fees are charged is not the real source of resentment. It is that the fee does not contribute to the development of the basic resource. The proper fees are not collected by the library which hires the real specialists.

A Healthy Phenomenon

The foregoing may seem a bit harsh on the information brokers; however, it is not the intent here to condemn all the brokers for all their activities. There is little subterfuge, and there is certainly nothing illegal about obtaining all the free service one can from the public library. Who gets what kind of service is a problem for the administrator and not for the broker. Stated more positively, the burgeoning of successful information brokers is a healthy occurrence. They are showing what can be done with innovation, creative thinking, and publicity or advertising (18, 19). They will also help to bury the incorrect concept that library service is free. It is not free—"There's no such thing as a free lunch" (20).

Chanaud (14) and Klement (21) state the source of the cost differently, saying that information is free, but that access to it is not free. In either case, the availability of information need not be expensive. What is expensive is the lack of information or at least the lack of the correct information. Both the well-informed business person and the poorly informed, frightened business person are willing to pay well to avoid the greater expense of doing without needed information.

There are several positive factors about the operations of the information broker.

First, most of them are capable of and usually do give good service. One of their critics said, "Of course they give good service. That is all they have." But, in the information business, if you have something else and do not give good service, you are not in the information business.

It is essential to the survival of the broker that he be able to respond quickly and effectively. One of the brokers said that if the client were not satisfied with what he received from the broker, he would not return for additional service. On the other hand, the staff member of a public or academic library can afford an occasional unhappy client, for there is the certainty that there will be new clients tomorrow. (This is true only within limits, as library users become more sophisticated and demanding.) But the results of poor service will more quickly affect the broker than they will the institutional staff member who will likely get paid at the end of the month, regardless of the service he supplies.

Keys to Good Service

The brokers have the ability to give good service because they can be flexible. They do not have to make a large capital investment that needs to be used to be justified. Someone else has made the capital investment in the resources in the libraries to which they have access.

This flexibility is based on mobility. They are able to move from source to source. In the institutional library, on the other hand, the staff is usually confined to the limits of the institution. Such types of resource sharing as interlibrary loan do exist. But how frequently can or will a library staff member travel across town or even across campus to use a bibliographic tool not in his own library? To ask the other library to use that tool for him is almost unthinkable.

The broker can reply with a speed that is hard for the institutional library staff member to muster on a continuing basis. The broker knows what speed his client requires and responds accordingly. The broker also knows that the client is willing to pay for the cost of the speedy service,

whether it is a long distance telephone call, special air freight delivery service, or a special trip across town or flight across the country to obtain the information.

While one possible negative factor about brokers could be their lack of know-how or their willingness to take advantage of someone else's know-how, the opposite is also true. Many are experts at locating and using information. They are inquisitive and flexible of mind as well as of movement. They are open minded and alert to new ideas and opportunities.

Their flexibility and speed also derives from their lack of encumbrance with institutional and governmental red tape.

Whose View?

How do the brokers view themselves, and how do others see them? As one might expect, the brokers, like most of us, view themselves quite favorably. None of those interviewed or who responded to the written inquiry was the least bit critical of their means of operation. Their view, simplified, is that they are performing a needed service, doing it well, and are having little difficulty with the libraries and other sources that they use.

But all is not happy in the relationships between the brokers and the libraries that they use. Some hints of discord have appeared in the literature recently (14).

The situations vary from: 1) a near symbiotic relationship between the library and the broker, 2) to impositions and intrusions by the brokers on the libraries, or 3) to the "let somebody else do it, we don't want to be bothered" attitude, and 4) to the incapacities of some libraries to do the job no matter how sincerely they would like to. Comments from the librarians on the staff of some of the libraries that the brokers use indicate some approval and some disapproval of the brokers' operations.

Some libraries welcome the presence of the broker in the library because it keeps many nuisance clients out of the library. In other situations the library staff members are unhappy, resentful, or perhaps even jealous or envious of the brokers using their facilities. Some brokers

do demand free professional help from the staff. Some of them provide less than satisfactory service. Some of them may be careless about their use of the collection and may be inconsiderate of the rights and needs of other users of the library.

In one area where there is a cluster of independent brokers, one of them remarked that they, "are operating in the face of a great institution that cannot get itself together." That institution, a major university library, is so departmentalized and its collection so scattered that the most effective network operating among the departments and branches is made up of the independent brokers who move freely from one collection to another to use the reference tools or to make photocopies with a speed and versatility that the giant library system cannot accomplish by itself. In this type of case, part of the normally internal circuitry of the information network has been externalized with a sort of bypass valve.

What Would You Do If . . . ?

In an effort to place the work of the independent brokers in perspective, consider these questions.

- Would you, as a company librarian, use the services of a free-lance operator to obtain photocopies of material which you know to be located in a specific library? Why should you? Why shouldn't you? Why not go directly to the library?

- Would you, as a special librarian, utilize the services of an independent operator to locate material for you when you have no way of determining the location of the material on your own? Why should you? Why shouldn't you?

- Would you, as the interlibrary loan librarian in an academic library, utilize the service of a free-lance operator to obtain copies of materials known to be in another university library when you know that the other interlibrary loan service is very slow or when the only way to verify, and thereby sanctify, the reference is to go look at the volume itself?

- How would you respond, as a reference librarian on the staff of a college library, to a lawyer friend who offers to

pay you to spend an evening or two or your weekend locating some articles to strengthen one of his cases? Would you recognize the opportunity and would you initiate the suggestion that you should be paid for your professional know-how?

- Consider the same situation, except that you are in the cataloging department of that college library. Next, promote yourself to head librarian and judge if your reaction might be different. What would you do in the same situation if you were on the staff of a public library?

- Suppose you are the research librarian in a medium-sized manufacturing firm or in an advertising agency and a neighbor—an engineer or a salesman—tells you that he needs to use a library once in a while but just does not have the time to do it. What would you tell him?

Filling a Need

No one disagrees with the basic need for libraries and for the development of library services. But if libraries are not capable, or not adequately supported with funds, or do not wish to deliver these special services, then some other agency needs to step in and do it. That is basically what the information brokers are doing.

There exists a partial vacuum, an unnatural phenomenon, and the pressure is being somewhat relieved by a new type of service. In the spirit of entrepreneurship or with a need to make a living, some enterprising spirits have recognized a need and an opportunity and are making efforts to fill that need.

Nobody should interfere with a person's right and capability to make a profit (or a living) selling a product in a free market in this country. Perhaps it has already been recognized that information is a marketable product, and that tax-supported libraries have been relegated to the level of a welfare agency which doles out information at no cost to those who cannot afford to pay for it.

The information brokers, along with other network participants, need to give themselves close scrutiny and must work to find each one's proper place in the overall information network so that the

cost of the network is supported in proper proportion by all who use it, so that it works equally well for all those who need it, and so that it not be short-circuited.

Only one thing is certain. This is an area of librarianship in which the rules, regulations, and codes have not been established. The profession is breaking away from concepts and methods of operation to which unquestioning adherence has become a manacle.

While iron-clad rules and regulations for the information brokers to follow are not necessary, there is a need for something more than the *caveat emptor* approach. Using the guidance, support, and discussion that can take place within a professional organization, there is an opportunity for the Special Libraries Association to foster the development of standards against which the information-on-demand organizations, both private and institutional, academic and public libraries included, can measure their performance and the quality of their services.

Acknowledgments

The author especially wishes to thank the information brokers who have talked to him and written openly and frankly about their operations.

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Received for review Apr 17, 1975. Revised manuscript accepted for publication Oct 13, 1975. This report is based on a 1973/74 Council on Library Resources Fellowship Study. Presented Jun 11, 1975, as a Contributed Paper, during SLA's 66th Annual Conference in Chicago.



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The Union Catalog—

Its Cost Versus Its Benefit to a Network

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■ A cost-benefit analysis of the 43-library 260,000-title Midwest Medical Union Catalog of books, conducted from June 1973 through May 1975 under a grant from the National Library of Medicine, studied the 49 year-old catalog in the context of interlibrary loan activity of the

Midwest Health Science Library Network. The catalog was tested against other methods of locating materials and against the alternative of using a large backup library (The National Library of Medicine) to fill requests instead of routing the request through the network.

I shot a rocket in the air,
It fell to earth, I knew not where
Until next day, with rage profound,
The man it fell on came around. (1)

REFERRING an interlibrary loan request without a locating device is like shooting an arrow or a rocket not knowing where it will land. The reaction at its destination will not be that in Masson's poem, but one does not know exactly what the result will be. It is to cope with this uncertainty and to provide comfort to ILL librarians and service to the patron that union catalogs have been created when sharing of resources takes place. Union catalogs have long been held to be the first step necessary for cooperative efforts. This study attempts to determine whether or not a regional union catalog of health

science monographs does in fact measurably aid such efforts.

The Midwest Medical Union Catalog (MMUC) is a main entry card catalog of 260,000 titles reflecting the monographic holdings of health science libraries in the six states (Illinois, Indiana, Iowa, Minnesota, North Dakota and Wisconsin) in the Midwest Health Science Library Network (formerly the Midwest Regional Medical Library). The catalog has existed at the John Crerar Library since 1926, at first reflecting the holdings of seven Chicago-area libraries and later the holdings for the region. The catalog is used only to locate materials for interlibrary loan. Interlibrary loan requests for monographs are forwarded to the John Crerar Library and, if not located in that library, are searched in MMUC and either sent to a holding library in the network or referred to the National Library of Medicine.

From 1973 to 1975, under a grant from the National Library of Medicine, an extensive cost-benefit analysis of the catalog was conducted. Since it is not possible

This research was supported in part by NIH Grant LM 01397 from the National Library of Medicine.

within space limitations to cover all aspects of the study here, this report concerns itself with the eleven hypotheses of the study and the results of testing these hypotheses. (Please see the Literature Cited section for a listing of the full reports). These hypotheses are specific to the network configuration in the Midwest Health Science Library Network; however, they might also apply to other cooperative or network situations.

The Tests

The hypotheses were written to analyze the catalog in the context of activity against the catalog (ILL requests). Furthermore, the hypotheses are relational in that they test the catalog against other methods of location. Finally, the hypotheses take into account the role of the National Library of Medicine as a backup library to the network.

Apart from the mean value, the statistical information used in testing the hypotheses is not included in this paper. This statistical information is available in the final report of the study (3). However, all hypotheses were tested at an 0.05 α level. Finally, the hypotheses below are statements of the Research (Alternate) hypotheses rather than of the Null hypotheses.

Research Hypothesis 1. A greater number of interlibrary loan requests for monographs can be located in the Midwest Medical Union Catalog (MMUC) than in the National Union Catalog (NUC).

Result. The hypothesis cannot be accepted. The probability of a request being located in MMUC is 40.2%. The probability of a request being located in NUC is 66.6%.

Research Hypothesis 2. Of the requests located in NUC, more than 50% either have no location given (cataloged only by the Library of Congress) or are located outside the geographic area included in the Midwest Health Science Library Network.

Result. The research hypothesis is accepted when NUC's *Register of Additional Locations* is not utilized in the experiment. In this case, 68.8% of the requests located in NUC do not have locations within the six-state area of the network. However, when the *Register of Additional Locations* is utilized, the hypothesis is not accepted, since 48.5% of the titles located in NUC cannot be located within the region. This means that, using NUC and the *Register of Additional Locations*, the probability of locating a requested title in NUC and within the region is 34.4%. It should be noted that location of a requested title within the region by using NUC does not necessarily mean that the title is held by a health science library in the region.

Research Hypothesis 3. A greater number of titles requested can be located in MMUC than can be located by using an expanded directory to select a probable holding library without checking any union catalog.

Selection using an expanded directory was done in two ways. First, a student assistant with an undergraduate degree in the sciences created a coordinate index to the subject areas covered by 63 of the health science libraries in the region. Then the student assistant selected a sample of requests, and using the index, assigned the requests to probable holding libraries on the basis of subject implied in the title of the request. The requests were then sent to the selected libraries for searching in their catalogs.

Since the student assistant's background in the sciences, and the fact that he had created the subject index, might have influenced the results, the experiment was later repeated using another sample of requests and the same coordinate index. However, a clerical person without a science background and formerly unfamiliar with the index made the selections in the second sample.

Result. The student assistant had a success rate of 41.4%. In this case, the research hypothesis cannot be accepted, since the success rate for MMUC was 40.2%.

The clerical person had a success rate of 30.0% and in this case the research hypothesis is accepted.

Research Hypothesis 4. It cost less to search MMUC for titles requested than to search NUC. [Cost here is a partial cost for searching the files only and does not include maintenance costs.]

Result: This research hypothesis is accepted. Cost is here expressed in terms of time for manual searching, since all other costs were the same for both methods. The average time to search MMUC was 113.6 seconds. The average time to search NUC (not including the *Register of Additional Locations*) was 270.6 seconds.

Research Hypothesis 5. It costs less to maintain MMUC than to maintain NUC.

Maintenance costs of MMUC include both the cost to the contributing libraries of making one extra card per set for the union catalog and the cost of combining and interfiling cards into the union catalog. A standardized cost-analysis form was used to obtain card production information from 32 of the 43 libraries and cost data from 22 of these libraries. This form was combined with visits by the researcher to 8 of the libraries to obtain cost information.

The cost of the National Union Catalog is the yearly cost of obtaining the monthly and annual volumes, plus 1/5 the cost of purchasing the quinquennial edition plus the average yearly cost of obtaining the Mansell volumes. This is a rough estimate only, not including the cost to six of the libraries in the network of contributing cards to NUC, nor accounting for the percentage that the use of NUC as a locating device would be of the total use of NUC in a library. However, the primary focus of this study is the cost of MMUC rather than the cost of NUC.

Result. It costs more to maintain MMUC than to maintain one set of NUC. The yearly cost for one set of NUC was \$2,437, while the yearly cost for MMUC was \$4,559 (\$2,358 for local card production and \$2,201 for combining and filing 34,000 cards). However, if it were assumed that the same libraries contribut-

ing to MMUC also contributed to NUC, and if the cost of card production were added to the single-set NUC cost, then the National Union Catalog would cost \$4,795 versus \$4,559 for the Midwest Medical Union Catalog.

Finally, when the cost of MMUC is expressed in unit cost—the cost of maintaining the catalog and searching MMUC divided by the total number of requests searched against the catalog—then the cost is \$1.90 per request.

Research Hypothesis 6. In the case of a request located in MMUC and referred to another library in the region, of the total time from origination of a request to receipt of the monograph or status report indicating nonavailability of the monograph, over 20% of that time is spent transmitting the request to MMUC, processing it there, and sending it to a holding library.

Result. The hypothesis is accepted. The amount of time taken to send a request to MMUC, locate it there, and refer it on to another library is 49.1% of the time necessary to process the request in the network. Of the time spent processing a request, 80% is time for transmitting a request to and from MMUC by mail or teletype.

Research Hypothesis 7. Of the requests located in MMUC, the percentage of items that could not be located in the *Index-Catalogue of the Surgeon General's Office*, the *National Library of Medicine: Current Catalog*, or CATLINE is greater than 30%.

This hypothesis and hypothesis number 9 examine MMUC in relation to the National Library of Medicine, the backup library of the network.

Result. The hypothesis is not accepted. The percentage of requests located in MMUC that could not be located in the *Index-Catalogue of the Surgeon General's Office*, *Current Catalog*, or on CATLINE was 23.0%.

Research Hypothesis 8. The percentage of titles requested and located in MMUC

that are held by only one library is greater than 30%.

Result. The hypothesis is not accepted. When the catalog is examined outside of the context of ILL requests, there does indeed appear to be a high number of unique items (52% of the 1969-to-present imprints are uniquely held—the only years when all currently contributing libraries were sending cards to the catalog). However, the percentage of requested items held by only one library is 30.2%. This is not sufficiently greater than 30%, according to standard statistical criteria, to accept the research hypothesis.

Research Hypothesis 9. Of the above titles in MMUC held by one library, the percentage that cannot be located in the *Index-Catalogue of the Surgeon General's Office*, in *Current Catalog* or CATLINE is greater than 30%.

Result. The hypothesis cannot be accepted. Of the titles held by only one library, 33.9% could not be located in the *Index-Catalogue of the Surgeon General's Office*, in *Current Catalog* or CATLINE. This is not sufficiently greater than 30%, according to standard statistical criteria, to accept the research hypothesis.

Research Hypothesis 10. There is a positive linear correlation between size (in terms of number of cards contributed to the union catalog) of contributing library and ability of that library to satisfy requests referred to the MMUC.

A positive linear correlation indicates that the ability to satisfy requests increases with an increase in the size of the contributing library. This hypothesis has implications for the problem of which libraries should be included in any union catalog.

Result. The hypothesis is accepted. The Pearson product-moment correlation coefficient is a positive 0.89, indicating a high linear correlation between number of cards contributed to the catalog and ability to satisfy requests. As the percentage of cards contributed to MMUC increases, so also does the percentage of requests that a library can fill.

Research Hypothesis 11. There are libraries contributing to the Midwest Medical Union Catalog whose contributed cards can satisfy less than 1% of the interlibrary loan requests referred to the catalog.

Result. There are no currently contributing libraries that can satisfy less than 1% of the requests. However, there are fourteen libraries that can satisfy 1-5% of the requests searched in the catalog, and some of these libraries have had few requests referred to them in the five years they have contributed to the catalog.

Conclusion

Using the results of the above hypotheses, a number of options for locational control were examined on the basis of the following criteria: locational probability, coverage, currency, speed of delivery, cost, enhancement of cooperative efforts, network interface, and survival probability. On the basis of this analysis it was recommended that the location of monographs for interlibrary loan in the Midwest Health Science Library Network be achieved by utilizing other existing or developing computerized data bases of monograph titles instead of the Midwest Medical Union Catalog, but that the current catalog be maintained at a minimal level until such time as these emerging data bases provide the locational probability currently possible with the Midwest Medical Union Catalog.

This recommendation is already being implemented in the network. At least seven of the health science libraries in the network are preparing to utilize the Ohio College Library Center (OCLC). And several libraries are looking into the possibility of replicating the minicomputer system being developed at the University of Minnesota Bio-Medical Library and linking together the data bases so that the bibliographic files of one library can be searched by another library.

As these systems develop in the Midwest Health Science Library Network, it will be possible to compare their perfor-

mance in locating monographs with the performance of the current catalog. It is this kind of systematic planning for network development that makes it possible to shoot rockets and arrows and know where they will land, or at least to know what the reaction will be when they land.

Acknowledgments

The author wishes to thank the health science librarians of the Midwest Health Science Library Network for their excellent cooperation and support in this project.

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Received for review Apr 17, 1975. Revised manuscript accepted for publication Oct 6, 1975. Presented Jun 11, 1975, as a Contributed Paper, during SLA's 66th Annual Conference in Chicago.

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Orientation and Instruction in Academic Art Libraries

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■ Various methods are proposed for art library faculty involvement in orientation and instruction in academic libraries and for cooperation in the dissemination of information between subject-oriented librarians. A circulating collection of art library guides and credit course syllabi currently in use (U.S., Canada) is reported. Relevance for other subject areas is suggested.

LIBRARIANS in academic institutions are aware of the need to orient students and faculty to their respective collections and also to teach discipline related research strategy. Equally important is the librarians' recognition of their need to cooperate in the dissemination of information about what is being taught (1). Although the visual arts are the primary concern of this paper, it is instructive to take an overview of the current trends in library orientation, and instruction in general, in academic institutions (2). There are some common problems and basic concepts that apply to most disciplines and special libraries within and outside of the academic community. In some of the following examples the word "public" can be substituted for "student" and the word "curator" for "faculty member."

By "orientation" is meant a walking tour of a building and/or a lecture which emphasizes location of materials, card catalogs, special libraries and possibly gives a simplified introduction to basic indexes. This information can also be supplied in the form of a film or videotape or in a slide presentation. Orientation can also be directed by an audiotaped or printed, self-guided walking tour. Written guides to whole collections or special subject collections can also be considered as orientation tools. For the purposes of this article library "instruction" means academic courses taught for credit.

A written guide is probably the most basic teaching tool. It has value for students and saves time in the long run for librarians in terms of a decline in repetitive routine questions. The newcomer to the campus probably benefits most from a written guide to the library that can be used in conjunction with other orientation techniques as a handy reminder or can be distributed to students as needed. Special libraries that are part of larger institutions have the added responsibility of informing potential patrons of their special functions, hours, and services. Subject collections not housed separately, i.e., are found in the general open stacks, can be confusing. In order to make the best use of such a collection, students require guidance.

A guide written for the faculty can also be useful for orienting new faculty members (3) and for opening up new lines of

communication between librarians and faculty. Upper division subject oriented undergraduate and graduate students need more intensive instruction. It is at this point that the potential scholar is nurtured and should be introduced in a consistent and systematic way to the original sources, foreign language resources, and special indexes. There are many variations on these themes that may work under particular circumstances. These will be discussed shortly.

Alternate Sources

A question raised at the 1975 SLA Conference in Chicago was, "What is the responsibility of museums to academic students who are not given library instruction at their home institutions?" The suggestions ranged from there is never enough time and it is not a museum library's function, to: try to set aside a day and send special invitations to art faculty including librarians to come to the museum library. By familiarizing the faculty with the library's holdings and procedures, they might be encouraged to filter this information to their students. Shocking as it seems, it is possible for students at colleges and universities across the continent to receive their BA degrees without having enjoyed the benefits of learning to use a library (4-6). Armed with reserve book lists, many students spend four years avoiding learning even the "mysteries" of the card catalog, let alone specific indexes.

There are a variety of reasons for this. Large lecture courses and changing teaching styles have probably had the most impact. One of the ways that professors cope with classes of 200 or more students is to do away with term papers and projects. Student progress is evaluated by means of machine gradable or fill-in type tests. These in turn often do not require much reading of even reserve room material. "Hand-outs" in class and greater use of audiovisual materials also reduce the need for the library.

Of somewhat less impact are the affluent students who invest in their own libraries and concerned faculty who open

their private libraries to students in order to alleviate immediate needs. All of these contribute to the long range problem, i.e., students' avoidance of the use of the library. If these students go on to graduate school where their needs become more specialized, their difficulty in finding material increases. As book collections grow in size and sophistication, the need for student library orientation and instruction becomes more pressing.

Faculty Orientation Necessary

Sometimes faculty compound the problem, unknowingly, because of their own unfamiliarity with library procedures, e.g., they assume that every book that they order is processed and received and therefore often add books to reading lists and tell students that the books are available at the library when indeed they may be out-of-print or possibly not yet published.

There is also the faculty assumption that students know how to use the library: this is based on several fallacies. First, some faculty sincerely believe that library skills have been adequately taught in elementary and high school. What often is not considered is that coming from even the best high school library situation, the college student still has to learn to deal with a much larger building, catalog, collection, and possibly switch from familiar Dewey to unfamiliar L.C. It is enough to intimidate even the would-be scholar.

If, on the other hand, it is accepted that there is a need to teach library skills, another kind of problem arises. Although not always articulated clearly, the question of who should have the responsibility for teaching library research methods is imbedded in the larger problem of faculty status and librarians' subject qualifications. This is particularly true at the graduate level.

At the elementary and high school level it is often assumed that librarians teach library skills. At the college level this is rarely a recognized function of librarians. Seldom does a librarian's job description include teaching responsibilities. For that matter, few library school curricula em-

phasize or even introduce this aspect of the profession (7). A further complication arises when the librarian/teacher is not allowed, or cannot afford the necessary time for class preparation because of pressing commitments.

Meanwhile, subject oriented faculty rarely have enough class time, knowledge, or inclination to help students develop research skills. Lists of suggested reading material "do not a researcher make."

Some graduate departments offer courses with an alternating library workshop/seminar approach. When non-librarians teach these courses, librarians are generally critical of the course content. Experience has taught that faculty often design questions which are too specific and deal with minutia which requires the librarians to do all the work without the students developing a sense of the process of research.

Faculty are generally quite knowledgeable about subject matter and the latest literature in their field of interest, but often miss a newly published index or a new book with an interdisciplinary approach. This is easily possible in the visual arts where reviews often appear years after the book's publication. This can be equally true of librarians. In addition, teaching ability depends to some extent on personality as well as methodology and thorough knowledge of subject matter. It does not necessarily follow that all librarians can teach graduate courses in library skills better than departmental faculty. However, librarians with a subject background are often equipped—in both subject and personality, but not always willing—to teach.

Librarians in the Teaching Process

In many cases librarians are involved in the teaching process (8). Enlightened department chairmen and library directors have often recognized the potential of library faculty. Unfortunately this is not always the case. In other instances librarians have been unreceptive to the idea of additional teaching responsibilities, especially when neither the librarian nor the library is compensated for the addi-

tional time involved. Nevertheless, a case for professional initiative is in order.

When good rapport exists between the library faculty and the departmental faculty a smooth path is prepared for cooperation in meeting student needs. Subject specialists are in a good position to create these ties. In terms of the visual arts, at the very least, written or taped guides to the collection can help students learn independence and free art librarians to answer in-depth questions. The introduction of a mini-workshop of one or more sessions in the library is a useful means of helping undergraduates. For the senior planning to go on to graduate work and for the graduate student, a full semester credit course in historiography and research methodology should be required. The librarian with dual loyalties to art scholarship and librarianship can and should play a part in this educational process of the student/scholar.

Schools of library science should be doing more to prepare librarians for this function. Advanced student librarians should have more "hands on" assignments that give them the opportunity to think through orientation and instruction projects and plan orientation programs: prepare library pathfinders (9), prepare slides, film or videotape orientations for a real or mythical library; prepare and teach a model lesson; design an information leaflet for students or faculty; prepare a walking tour of a real or mythical library. Students as well as library school faculty may think of other assignments which can be innovative learning experiences. None of these projects will assure that librarians will be good teachers but they will at least afford future public service librarians the opportunity to experiment early in their careers and perhaps give them the confidence to develop further.

Practicing librarians can participate more in the teaching process by using professional initiative in innovative teaching situations. Departmental chairmen and curriculum committees are often most receptive. Students, as well as librarians, have much to gain from the experience.

An Experiment

It is possible to report what is considered a successful experiment at the SUNY at Stony Brook: a course in library research in art history open to junior and senior art majors. Although the course was designed for students going on to graduate work in art history, several studio students found the course applicable to their needs. The requirements for enrollment are four courses in art history and the ability or desire to write an in-depth research paper on an acceptable topic. Half the classes are lecture/seminar format and half are workshops in appropriate sections of the library; reference, audiovisual, special collections, and periodicals. One class session is usually in another library. The course is offered once a year and meets twice a week for fifteen weeks. It is a regularly scheduled three credit course. There are no examinations but there are scheduled assignments. (The course syllabus may be obtained from the author on request.) Since the course is not required, only the top students apply. This makes for a hard working, capable, and challenging class. Ideally all art students would have the opportunity to learn how to make the best use of library resources but this would require additional class sections.

Cooperative Groups

Librarians around the country have formed or are in the process of forming organizations in order to pool information about curricula and how individual methods came to be introduced into their particular institutions. Project LOEX (Library Orientation Exchange) is one such group. The LOEX files contain information and instructional materials contributed by cooperating libraries. All participants in Project LOEX have access to this data bank either through written requests or personal visits. Communication is maintained with member libraries in order to keep everyone involved up-to-date on LOEX activities. Yearly conferences and published proceedings are also a source of information. Project

LOEX is based at Eastern Michigan University.

In Wisconsin (10) and in California (11), librarians have taken the initiative to establish a network of communication within their states. A similar project is in the organizing stages in New York State (12). ACRL (13) has an ad hoc Task Force on Bibliographic Instruction. Library Pathfinders, which originally were compiled by volunteers, are another cooperative venture, now available commercially. A select number of art topics, appropriate for beginning research students, are currently available (14).

For the most part, little material on art is available from any of the just mentioned sources. It was this lack of art librarians' input into these projects that prompted the author to start a circulating collection of art library orientation and instructional material. These include: guides to individual art libraries, art library guides to specific collections, newsletters, syllabi and assignments for research courses taught by librarians, letters detailing a variety of methods for communicating with art students and faculty. Some variations on a theme are: custom tailored tutorials for one or more students, term paper clinics, informal group workshops (with and without refreshments), three credit undergraduate and graduate courses, no-credit one or more hour-long lectures to small groups and/or large classes both in the library and in the classroom, six credit, two-semester required courses in methodology and historiography. The collection is available to any art librarian who requests material and agrees to return it within a reasonable amount of time.

The browsing collection has many uses:

1) It can give inspiration and support to librarians who aspire to teach but have not had experience preparing a syllabus or class assignments.

2) For those who would like to prepare a guide to their collection and can learn best by example, the browsing collection can be experienced both for the content and from the visual point of view.

3) A certain portion of every guide is exactly or almost exactly the same, e.g., a

description of the "N" classification. A careful examination of the collection can help avoid duplication of effort.

4) It can create a network of interested librarians willing to share information for the benefit of the profession.

5) It can stimulate a dialogue whereby a consensus might be reached as to the usefulness of what is being included in the guides and the syllabi.

A survey has not as yet been made in order to determine what has actually been produced or occurred as a direct result of librarians having seen some of the collection. A few librarians have contributed new material when they returned what they had borrowed. Others have written in appreciation of the opportunity to browse. New and revised contributions are always welcome, especially information about new research courses in art.

One important aspect of the collection is its diversity which attests to the ingenuity of art librarians working independently in a variety of institutions where student and faculty needs differ. It is hoped that art librarians willing to cooperate, coordinate and collaborate by sharing expertise, in the form of a people to people exchange, will expand the scope and the retrieval value of the collection.

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Received for review Dec 16, 1974. Revised paper accepted for publication Oct. 13, 1975. Presented Jun 11, 1975, as a Contributed Paper, during SLA's 66th Annual Conference in Chicago.



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Biomedical Journal Holdings List:

A Multi-Subject Approach

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■ The Health Sciences Library of the University of Louisville has recently developed a new computer-printed subject index to its currently received journals. The index, which required no new programming, was generated from a deck of IBM punched cards sorted in-house into

alphabetical order within the Union Catalog of Medical Periodicals of the Medical Library Center of New York subject codes. Details of the rationale, practical considerations, methodology, and future possibilities for the index are discussed.

HAVE YOU EVER gone through your library's list of journal holdings, one by one, when a new academic department head wanted a list of all journals held which related to his discipline? Has a patron forgotten the name of a journal which he scanned last year and now needs to cite? He knew the subject content and generally what an issue looked like, but not the title. In the medium-size medical library, the Health Sciences Library of the University of Louisville, these are day-to-day problems. A solution which would give us general subject access to the journal collection was needed. Classifying and shelving journals by subject was a possible solution; however, like many libraries of this type, the preference was to shelve journals alphabetically by title. Specific access could be made by using *Index Medicus*, *Chemical* or *Biological Abstracts*, or MEDLINE, the on-line, computer-based bibliographic service of the National Library of Medicine. None of these, however, have the broad subject approach which the traditional book catalog,

with several subject headings per title, provides for the monographic collection.

The Rationale

Based on experience with an experimental journal subject list, it appeared that an improved list could serve as both an information and a decision-making tool. For example, new faculty members, especially department heads, could be provided with an accurate, up-to-date list of journals held in their areas of interest. Journal support for new programs added to the service responsibilities (e.g., nursing) could be better planned if we knew more precisely what we already held. Program accreditation visits, which often precipitated yet another item-by-item perusal of the journal list for pertinent titles, would be much easier. The information librarians would have an up-to-date subject guide which might provide a lead to that "little blue foreign physiological journal" which some scientist had looked at last month. Librarians have a firm belief in se-

rendipity, and such a list could enhance its rate of occurrence.

The decisions about adding or substituting titles could be more rational with an overall subject guide. Journal cuts, in a time of sky-rocketing prices and static or slowly rising budgets, could be more reasonably defended if we were able to show that one area was not being neglected in favor of another. We would not inadvertently discontinue a title which, for the collection, was unique in its subject coverage.

Precedents for such a subject guide exist. Bowker's recently issued encyclopedic subject guide to *New Serials Titles* (1) is designed for general use. The subject section of the periodical holdings list of the Health Affairs Library of the Medical University of South Carolina (2) is tailored to that library's needs, with more than one general subject assigned to each title as needed. Biomedical journals tend to be interdisciplinary in coverage (e.g., *Biochemical Pharmacology*), and titles should appear in several places in a well-designed subject guide.

Practical Considerations

This library's semi-automated journal management system, designed and described by Livingston (3), is based on key-punched IBM cards, which are eventually read onto tape. The tape, after appropriate additions, changes, and deletions, is printed out by computer quarterly, producing the current *Journal Holdings List*. Each journal has been assigned one UCMP (Union Catalog of Medical Periodicals of the Medical Library Center of New York) subject heading. This subject designation appears as a 3-digit code in columns 78-80 of the first record for each journal. The codes range from "000 Abstracts, Bibliographies, and Indexes" to "984 Zoology." The experimental subject list was produced by programming the computer to sort the journal titles by these codes numerically and to print a list of journals arranged alphabetically within subject categories. The list was useable, but showed the necessity for revision and reevaluation. It

Figure 1. Page from SERLINE Print-Out

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MH- MICROBIOLOGY

TI- BACTERIOLOGICAL REVIEWS
MH- MICROBIOLOGY

TI- BEHAVIORAL NEUROPSYCHIATRY
MH- PSYCHIATRY, NEUROLOGY, PSYCHOLOGY

TI- BEHAVIORAL SCIENCE
MH- PSYCHOLOGY

TI- BEHAVIOUR RESEARCH AND THERAPY
MH- PSYCHIATRY, REHABILITATION

TI- BIBLIOTHECA HAEMATOLOGICA
MH- HEMATOLOGY

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was also useful to assign appropriate additional subject headings, and to limit the list to only those journals currently received.

To keep from "re-inventing the wheel," it was decided to use whatever National Library of Medicine journal subject cataloging was available. In fact, it was the availability of such data, on-line, that encouraged the authors to start the project. A new list had been needed for several years, but seemed too extensive to be done locally. Therefore, the previously assigned subject cataloging data was supplemented by that of the National Library of Medicine's SERLINE (SERials-on-LINE), which contains "bibliographic and locator information for over 6,000 biomedical serial titles which are current or which ceased publication after 1969" (4). SERLINE was commanded to print out the titles and subject headings for those journals in the data base which had Louisville's locator code, 05LOU (Figure 1). This off-line print produced about 60% of our titles, the missing ones being mostly dental or nursing titles which were not then in the SERLINE data base. The subject headings printed out were a mixture of UCMP and MESH (Medical Subject Headings of the National Library of Medicine), and the list had to be edited carefully to insure that all MESH headings were converted to the UCMP, which we had decided to continue using. In keeping with the philosophy of the general subject approach, it was decided to continue using the UCMP subject headings because they are more general than those of

Figure 2. Subject Code IBM Cards for a Typical Journal

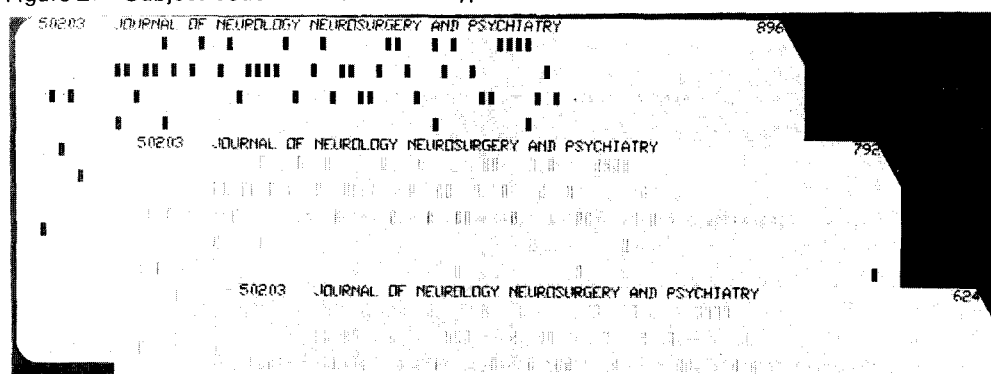


Figure 3. Sample Page from Finished Subject List

ENVIRONMENTAL SCIENCE		
06927	AM INDUSTRIAL HYGIENE ASSOCIATION JOURNAL	276
18069	ARCHIVES OF ENVIRONMENTAL HEALTH	276
21031	AVIAT, SPACE & ENVIRON MED	276
35439	ENVIRONMENTAL HEALTH PERSPECTIVES	276
35445	ENVIRONMENTAL RESEARCH	276
81510	SEL REFS ENVIRON QUAL HEALTH	276
ENZYMOLGY SEE BIOCHEMISTRY		
EPIDEMIOLOGY SEE PUBLIC HEALTH		
EPILEPSY SEE NEUROLOGY		

MESH. The authors anticipated receiving more subject headings per title than proved to be the case. The SERLINE manual suggested "an average of three," but most of this library's titles had only one or two assigned.

Methodology

Only currently received journals were included in the project. A duplicate of the master file of these journals was key-punched, producing a deck of about 1,350 cards. Each card, at this stage, showed only the journal's in-house serial number and title. The 3-digit subject codes were then assigned to each journal in a three-part process, with a volume of the journal in hand. The process consisted of: 1) re-evaluation of original coding; 2) evaluation and editing of SERLINE subjects; 3) assignments of additional subjects as needed.

The subject codes were written on the cards, with insertion of additional cards for additional subjects. The eventual result, when all key-punching was completed, was a deck of about 2,500 cards with one card listing each journal title and subject code (Figure 2). Subject assignments ranged from one to four per journal.

The cards, previously sorted into alphabetic order, were then sorted on columns 78-80, producing a deck in which they were grouped alphabetically into subject areas. This new file was carefully checked, subject by subject, for obvious discrepancies. Reading the complete file over a short time span gave a better perspective, so, at this point, a few additional subject headings were assigned. Appropriate header and spacer cards were inserted. The deck was then read into the computer at the University Computing Center, and printed out on the high-speed printer onto

6-part paper. Figure 3 is a reproduction of a sample page from this printout. This simple type of listing requires no programming at the Center and is done without charge to the library.

This subject deck has become the library's master journal subject file. Journal cataloging routines have been amended to pull old cards or to provide the necessary number of new cards when *Journal Holdings List* entries are added, changed, or deleted.

Future Possibilities

Practical considerations dictated that most of this project be done in the library, using existing unit-record equipment, and involving no new programming at the University Computing Center. There is the possibility that many of the library record-keeping routines could be moved to the Health Sciences Computing Center. If this were to happen, journal cataloging

data could be stored on disc or tape and reprogrammed to permit specified partial or complete printouts of the journal subject list. In addition to the master subject list, individually designed, current subject lists could then be provided for interested Health Sciences Center faculty and staff.

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*Received for review Sep 11, 1975.
Manuscript accepted for publication Dec 1, 1975.*



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Special Libraries in Israel

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■ The development of special libraries in Israel is due largely to the shift in the government's development policy, from agriculture to industry, in the 1960s. The growth of larger industries with increased research and development efforts resulted in greater information needs. The Center for Scientific and Technical Information was established in 1961 to coordinate information sources with research needs. The nearly 300 special libraries in existence can be classed into several types: li-

braries of research institutes, medical libraries, industrial libraries and government libraries. Most suffer from lack of trained library personnel, inadequate funds for service, no defined acquisition policy and lack of space, problems which are gradually being overcome. The overall pattern of special library development is characterized as a process of evolution rather than planned response to acute needs.

THE SPECIAL LIBRARIES of Israel are a relatively recent development and the by-product of advancements made in research and industry. The oldest and largest libraries are linked to research institutes, while another category is connected with hospitals, or, in some instances, with professional associations (e.g., the library of the Association of Engineers and Architects). The newer types of libraries are related to government agencies and to the most recent industries. The libraries of the Ministry of Defense and of the Israeli Armed Forces, which are often special libraries, cannot be included in this study, at least not in detail, because this is classified information. In the main, libraries in specific and narrow subjects and fields, and reference collections for specific industrial branches, form the majority of the 283 special libraries listed in the *Directory of Special Libraries 1968-69* (1).

A few words should be said about the development of scientific research and industrial knowledge in Israel. The major problem which the State of Israel had to overcome after independence, was to absorb the immigrants pouring into the country. In order to house and feed the rapidly growing population, all resources available for research were diverted to agricultural research. The agricultural development of Israel has surpassed expectations and the country's self-sufficiency in the production of many basic foodstuffs was achieved in record time. However, toward the end of the 1950s and early 1960s, economists began to point out the limitations, imposed by the country's geographical and climatic conditions, on further development of agriculture. They recommended that the country shift its development to industry, which would require highly trained manpower and superior technological knowledge, while not

requiring much in the way of basic resources, which were in short supply in Israel (2). The idea was slowly adopted; funds allocated by public and government agencies remained at their high level, while the percentage devoted to industrial research increased.

Since Israel's industry was mainly composed of small industrial plants, relatively few resources were devoted to research and development. In 1967, industry provided only 6% of the funds spent on research and development and performed only 11% of the research (the additional funds were provided mainly by the government). Thus, the major portion of funds devoted to research and development in Israel comes from government sources and from research funds provided through the U.S. PL 480, which are also channelled through public agencies (3).

As more attention was devoted to industrial development, plants grew larger, local research and development gained importance, and demands for information grew. As a result, some of the larger industries accumulated small collections of specific material.

Center for Scientific and Technological Information

In recognition of increased information needs in the developing industry of Israel, the Center for Scientific and Technological Information (CSTI) (4) was established in 1961 by the National Council for Research and Development (which is sponsored by the Prime Minister's Office). The founding charter of CSTI defined its role as "bridging the gap between information which is increasingly available in all branches of technology and research throughout the world, and the needs of Israel's scientific development" (4, p. 23). The CSTI was also meant to serve as the coordinator of the activities of the National Council for Research and Development in all aspects of information.

The Center for Scientific and Technological Information was active in promoting special libraries, in organizing an association of special libraries, in training librarians and in organizing librarians'

meetings, including the International Conference on Information Sciences in 1971. The center also initiates research in information retrieval, publishes directories and bibliographic publications, and develops international relations with similar centers throughout the world. In addition, it built a small reference library of its own and provides direct Selective Dissemination of Information (SDI) service to many industrial establishments in Israel (800 in 1969).

Unlike the Library Unit for Public libraries of the Ministry of Education and Culture, CSTI did not systematically survey the subjects related to its activities at the beginning of its function and did not formulate policy stating goals to be achieved by stages. Instead, it tried to achieve simultaneously many goals, some of them contradictory (for instance furthering special libraries and information centers while giving direct service to customers), and thus, its efforts were less effective than those of the Unit for Public Libraries.

In 1973, there were approximately 300 special libraries in Israel, most of them small and difficult to classify, but several types can be defined.

Libraries of Research Institutes

These include libraries of fourteen government research institutes and several other research institutes, some linked to universities, some linked to defense establishments. Their libraries are sometimes sizeable, with important collections, such as the Central Agricultural Library at Rehovot, the library of the Atomic Energy Commission at Nahal Soreq, the library of the Biological Institute at Nes Ziona, the library of the Arid Zone Research Institute in Beer Sheva (the latter will be incorporated into the University of the Negev), and others. Their collections are composed of a large selection of periodicals and scientific reports from throughout the world as well as specialized material, ordered especially by the scientists.

The libraries usually provide reading room facilities as well as circulation of

books to the scientists. A few have made timid beginnings to provide their clients with other services, such as editing of scientific papers. Most of Israel's scientists prefer to publish their most important work abroad. This means writing papers in English, as even European scientific periodicals often accept English language papers. The working knowledge of English by the average Israeli scientist is good, but not always fully up to the demands of the more important periodicals.

SDI service is rare in Israeli special libraries. An attempt made in 1965 to introduce SDI at the Agricultural Library at Rehovot failed. The whole idea was shelved, mainly on the grounds that a scientist relying on other sources than his own is in some way giving up his responsibility, an approach which is consistent with the Central European attitudes prevailing in the academic community of Israel up to the 1960s (5).

Israeli scientists have developed an attitude of distrust towards the abilities of nonscientists (and more specifically librarians) to retrieve information comprehensively or accurately. When they do not do their own searching, they use the services of junior assistants. It is understandable that when these persons reach scientist positions themselves, they perpetuate the notions they acquired during their professional formation (6). The reservations of the scientists were not wholly without basis. Many of the librarians had neither the background in science, nor training in the methods of modern information retrieval. In several cases, people appointed to run these libraries had no academic training at all. Even in cases where the appointees did have academic training, it was not unusual to appoint a man with a degree in law to run a library for the natural sciences. The scientists retaliated by insisting on persons trained in their respective disciplines, without realizing that this usually meant somebody completely unfamiliar with library procedures and information retrieval. Sometimes, due to the social composition of scientific manpower in Israel, this meant limited productivity (7). Thus, the distrust deepened, making the

scientists rely on themselves and their assistants to do their searching and regard the library only as a storage place for books.

One should note here that the attitude towards scientific information is different at defense-linked establishments where attention is given to libraries and information centers. Some of these libraries perform computer-based SDI services. They suffer, however, from problems similar to those of other libraries regarding manpower, and employ both librarians and scientists (8). Many of the information centers are headed by scientists and engineers, and many senior positions were manned by such scientists, because professional librarians on an appropriate academic level could not be found. A change has begun to appear during the 1970s and more librarians have been given senior positions on the staffs of the defense information centers, since junior scientists or scientists serving as information officers in subjects outside their own discipline have themselves often proved inadequate to the information needs of their constituencies.

Medical Libraries

The library of the Faculty of Medicine of the Hebrew University which also serves as the library of the Hadassah Hospital in Jerusalem, is the largest and most comprehensive medical library in Israel. However, even this library does not include in its services connections with MEDLARS, which are being taken care of at Hadassah Hospital by another department (9). Other large collections are to be found at the Beilinson Hospital and at the Tel Hashomer Hospital in the Tel-Aviv region. There are many limited collections of books near hospitals and regional offices of the Ministry of Health and the Medical Association offices in the largest cities. Thomas found in her survey of 1969-1970 (10), that all medical libraries in Israel had serious problems in supplying information by modern methods, due to the lack of institutional planning, contractual cooperation between institutions and status and quantity of personnel employed.

The survey emphasized that most library collections were haphazard and that the medical libraries of the Ministry of Health and the Medical Association, for instance, lacked material in related subjects such as biochemical instrumentation, building and management of hospitals, etc. Some beginnings in the standardization of medical records was mentioned but the organization for retrieval was inadequate.

The situation of the medical libraries developed little during the first years of the 1970s with the exception of a small new library established to serve the Aba Khushi School of Medicine, which opened in Haifa in 1970, and a medical library begun in 1972 at the University of the Negev.

In 1973, a survey of medical information, prepared by an American librarian, proposed the establishment of a medical information network based on regional centers (11), a recommendation that had already been proposed to Israeli physicians at least as early as the Thomas survey of 1969. No formal results in cooperation are noted but a modest program for cooperation in the Tel-Aviv area was reported in 1975 (12).

Libraries in Industries

For a survey prepared in 1968-1969 by Gonen, eighteen industrial plants having a Research and Development Department were visited (13). Libraries were found mainly in the plants related to electronic and similar industries, and pharmaceutical and chemical plants.

The size and quality of these libraries varied, all were small. They lacked trained library personnel and were the responsibility of one of the engineers, who dedicated most of his time to other duties.

Industries connected with large plants abroad, even when they did have a research and development department, received their information from abroad.

Libraries in Government Agencies

A survey carried out by Vilentchuk (14), a senior officer of the Center of Scientific and Technological Information

may better represent the special libraries in Israel, because it checked 62 governmental libraries, a large sample for libraries which vary widely in their subjects and size (15).

The study dealt with four aspects: budget, manpower, acquisitions policies and library space. The survey did not deal directly with problems of library organization or service.

According to this survey, it seems that while the acquisitions budgets of special libraries in Israel are small, the funds devoted to manpower are ridiculously low and sometimes downright insufficient even for the provision of a reasonable organization of the collection. Thus, even when literature is available, its effective use is hampered by lack of organization, trained manpower, and by insufficient services provided by the library. Funds spent on acquisitions, without attention to library services are largely wasted.

Where people with some professional qualifications are employed in a library, these qualifications have been judged by personnel officers, who were unfamiliar with the librarian's functions and the tasks he should undertake in the library. It seems that much remains to be done in working out criteria for employment in a special library, and this mainly because there is a scarcity of professionals with any sort of library training. Even a trained librarian without a clerical assistant will find himself spending a good part of his time performing tasks that could be left to junior workers, when available.

The librarian's academic background, where it existed, was often in a subject remote from the library's specialty. The attitude of those responsible for hiring staff was "that it did not greatly matter what the academic background of the applicant was," mainly because the librarian was conceived of as essentially a clerical worker rather than a subject expert. The resultant situation is illustrated best by the following data presented in Vilentchuk's report. The data list the educational level of the directors of the libraries included in the survey (Table 1).

No acquisition policy could be traced in any of the libraries surveyed. Acquisition

Table 1. Educational Background and Library Training of Directors of 62 Special Libraries in Government Offices*

Academic personnel with library training	8
Academic personnel without library training	10
"Librarians" or "Assistant Librarians," graduates of nonacademic training courses for public librarians	3
"Librarians" or "Assistant Librarians," graduates of nonacademic training courses for special libraries	5
Experienced library workers, lacking in formal education and library training	10
Library workers without formal or library training	26

* The figures do not include semi-governmental library directors, and therefore cover only 62 special libraries.

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was based entirely on the demands made by the clients or the executives. Most collections were found to be rather inadequate, with the exception of the research and development departments, whose collections were better than most, mainly because of the need of the research staff for books and information related to defense research.

In most instances, space was found to be inadequate, both for the organization of the collections and for service. Crowded libraries and difficult access prevented the use of these libraries, even when in other respects relatively substantial efforts were invested in libraries (14).

Summary

A certain overall pattern of the development of special libraries prevails. First, there is in Israel, as elsewhere, an accumulation of books. Support for these books increases with the increase in research needs. At this stage the librarian, or the person in charge of the library, is expected to fulfill mainly clerical duties. With further increase in the needs of the research, full-fledged libraries emerge and professional librarians are expected to organize them in a conventional way. There is still no full recognition of the need to provide specialized and modern information services. Lastly, when the re-

search is more active—this occurred in Israel's defense establishments because of the peculiar political situation—the scientists overcome their distrust of information provided by others, and begin to expect full information services. At first these services are provided by other scientists or engineers who are themselves engaged in research.

The last stage, which is only beginning to emerge in Israel, is marked by the replacement of engineers and scientists by professional librarians. This last stage is conditioned by several factors: first, a shortage of scientists and engineers who are ready to enter the field of information; second, a certain disillusionment on the part of the consumers with the performance of scientists who lack bibliographical skills; and third, the availability of professional librarians to take over the information tasks. This process of evolutionary rather than planned response to acute needs and pressures is a costly one. Libraries are constantly required to adapt and reorganize their services in response to new demands; and many of the services that could have been provided from the beginning are late in coming into being.

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13. Gonen, Shlomo / Findings from Visits in Industrial Plants and Research Institutes (In Hebrew). *Report of the Committee for Development of Technical and Scientific Information*. Jerusalem, 1970, p.77-90.
14. Vilentchuk, L. / Survey of Libraries in Governmental Offices (In Hebrew). In *Report of the Committee for Development of Scientific and Technical Hebrew Information in Israel*. Jerusalem, n.p. 1970, p.105-109.
15. Mrs. Vilentchuk was for many years in charge of the library of the Engineers and Architects Association and for most of the last decade a senior officer of the Center for Scientific and Technical Information. She has been active in improving Israel's special libraries, by organizing training courses for special librarians and in 1967 and 1969 organized two courses for information officers. She also founded, with the help of a few other librarians, the Israel Special Library and Information Center (ISLIC) Association.

Received for review Sep 15, 1975. Revised manuscript accepted for publication Dec 1, 1975. This paper was adapted from the section on special libraries in the doctoral dissertation, "Library Development in Israel," submitted to the Graduate Library School, University of Chicago, 1975.



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Survey of Photocopying Procedures In Special Libraries

When a survey of photocopying practices in special libraries was suggested some years ago, several predictions or hypotheses were advanced. The *first* favored hypothesis was in two parts:

- 1) That many special libraries would not have data available; and
- 2) That a primary reason would be that the copying equipment (of any variety) was not located in the library and/or that the staffs of many special libraries had neither control nor knowledge of materials copied.

A *second* hypothesis advanced was that the policy of parent organizations frequently does not allow employees to answer any questionnaires about internal operations.

A *third* hypothesis was that the library world is so saturated with survey questionnaires—student research projects, faculty questionnaires, and governmental agencies among others—that many questionnaires go directly into the waste basket.

The results seem to support all three hypotheses in whole or in part. SLA's triennial salary surveys produce a 60%–65% response. Therefore, we felt that we could hope for a 30% to 35% response on the photocopying survey—a level which is considered to be good by many organizations that specialize in surveys.

The design of the questionnaire was, of course, somewhat influenced by the above hypotheses. As in any survey one must, of course, assume that the respondents are also representative of the non-respondents.

The questionnaires were *not* mailed to Student Members or Retired Members. Approximately 7,200 questionnaires were mailed, and approximately 1,300 were returned (that is 18%). Belatedly we realized we had had many more responses through telephone calls or notes (rather than the returned questionnaire). Because such messages were directed to a number of persons who had not kept a record of such messages until it was too late to

recover and tabulate them, we estimate that there was about a 25% response. The “non-standard” responses were primarily of two kinds:

- 1) Someone else in the organization was submitting the data; and
- 2) Organizational policy would not allow a response.

Of the questionnaires returned, 1,150 (or 16% of questionnaires mailed) were answered essentially completely.

- 45% “For profit” parent organizations
- 15% “Not-for-profit” parent organizations
- 15% Government (all levels)
- 19% Academic (general campus, departmental and research institutes)
- 3% Public
- 3% Other

A crucial question was:

“Do you consider *your* library, department or branch to be a special library?”

This question was crucial because Special Libraries Association has members in public libraries, university libraries and school libraries—but such respondents would not be expected to be representative of either special libraries or of their own types of libraries.

There were 1,027 respondents who felt that their operation was a “*special library*” (14% of questionnaires mailed). It is, therefore, these 1,027 questionnaires that were considered for analysis.

The replies to the question:

“Is your library open to the public and/or are its facilities available to the public?”

are unclear because of the number of “No Replies” to the two subcategories of the question:

	Yes	No	No Reply
Without Restriction	27%	46%	27%
By Special Arrangement Only	62%	16%	22%

The “No Replies” must, perhaps, be interpreted in view of the many statements in

SLA Chapter Directories that facilities are available to SLA members *only*.

Because of the first hypothesis mentioned above, the questionnaire was designed to report estimated relative number of pages of different materials copied in lieu of actual page counts (e.g., within the period of valid copyright, after expiration of copyright, non-copy-righted materials). It has been more difficult than expected to compile these responses, but there appears to be a clear separation in frequency—listed below from the most frequently copied to those least frequently copied.

Relative Frequency

100	Periodicals (under copyright 1918-74) (In-print & out-of-print)
50	See footnote
37	Proceedings (under copyright 1918-74) (In-print & out-of-print)
30	Monographs (under copyright 1918-74) (In-print & out-of-print)
*28	Unpublished Materials (i.e., internal documents)
*22	Government publications
12	Proceedings (pre-1918)
9	Periodicals (pre-1918)
7	Monographs (pre-1918)

*If government publications and unpublished materials (neither being under copyright) are combined, the combination is clearly in 2nd place with a relative frequency of 50.

Although a distinction between in-print and out-of-print while under valid copyright was hoped for, the respondents were not all sure of this distinction in their statistics. About 14% of the respondents were able to make the distinction. In Tables 1-3 the percentages are of the special library respondents.

Of the 1,027 special library respondents, 15% reported no book-copying machines in the library, while 83% reported one or more machines in the library.

Approximately one-quarter of the libraries (27%) reported that the copying equipment was operated only by library staff. Almost three-quarters (70%) reported that the "book-copying" machines were used by all manner of persons (including library staff) to copy both library and non-library materials (for example, correspondence, announcements, etc.)

Replies by the 1,027 respondents who stated that they considered their library to be a special library were compiled separately.

	Photocopying for internal use within the parent organization	Photocopying for external use at request of another organization
Yes	96%	71%
No	2%	17%
No Response	2%	12%

Of the photocopies prepared as the result of requests received from external organizations, 48% were reported to be requested as photocopies; and 61% were reported to have been prepared by the supplying library in lieu of an interlibrary loan. Some respondents replied positively to both questions (for an apparent total of 109%); one possible explanation is that some libraries prepare photocopies of certain titles in lieu of interlibrary loans but loan other titles when requested.

Charges for Photocopying

Per Page	Internal Use	Inter-Library	Income in Excess of Costs
None	76%	72%	95%
\$0.01-0.10	23%	20%	4%
\$0.11-\$0.20	1%	4%	1%
\$0.20-\$0.30	1%	3%	-

For the bulk of the libraries that reported an income in excess of copying expenses, the excess amounts per copy were concentrated at the \$0.01, \$0.05 and \$0.10 levels. This would appear to suggest that these amounts may be arbitrarily defined through internal organizational accounting procedures.

The survey questionnaire was accompanied by a letter from the SLA Special Committee on Copyright; the letter is presented as an Appendix to this report.

Because of the first hypothesis mentioned at the beginning of this report, the questionnaire had been designed so as to obtain either 1) *actual* number of copies in each category when the data were available, or 2) an *estimate* of the numbers in each category if definite records were not maintained. Fewer respondents had hard data than had been expected. Those respondents who reported estimates attempted to add narrative notations for clarification. Therefore, the returned questionnaires could not be keypunched directly without extensive time-consuming editorial intervention. Subsequent attempts at many kinds of correlations by computer resulted in statistically unreliable tabulations. Much more time was required to study the returned questionnaires and to prepare this report than had been expected.

Table 1. Periodicals

No. Pages/ Month	1918-74 In-Print	1918-74 Out-of-Print	Pre-1918	Not Copyrighted
None	13%	66%	89%	84%
1- 1,000	62%	24%	11%	14%
1,001- 5,000	16%	8%	0	1%
5,001-10,000	5%	2%	0	1%
10,001-20,000	4%	0	0	0
	100%	100%	100%	100%

Table 2. Monographs

No. Pages/ Month	1918-74 In-Print	1918-74 Out-of-Print	Pre-1918	Not Copyrighted
None	48%	80%	90%	88%
1- 1,000	50%	20%	10%	12%
1,001- 5,000	2%	0	0	0
5,001-10,000	0	0	0	0
10,001-20,000	0	0	0	0
	100%	100%	100%	100%

Table 3. Number of "Book-Copying" Machines in Library

No. Machines	In Library	Staff Operated	Staff & Others (inclgd. non-library materials)
1	52%	62%	57%
2	26%	21%	22%
3	12%	9%	13%
4	6%	6%	5%
5	4%	2%	3%

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The single most significant result of the survey is the relative frequency of copying for different categories of materials (copyrighted and noncopyrighted).

This survey of photocopying in special libraries adds emphasis to the need for the proposed survey of photocopying in all types of

libraries to be sponsored by NCLIS as was recommended by the Conference on the Resolution of Copyright Issues on April 24, 1975.

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APPENDIX

To: SLA Members
From: Special Committee on Copyright
Subject: 1974 Survey of Photocopying Practices in Special Libraries

Special Libraries Association has announced an official position for possible long-term accommodation on the issue of single-copy photoduplication of copyrighted works by libraries and for libraries. This position was stated in *Special Libraries* 65:158+ (Mar 1973), from which the following is quoted:

"... It would seem appropriate for SLA as an organization comprised of both private and public libraries to seek a rational legislative solution to photocopying problems which will reasonably satisfy the needs of libraries and their patrons and which will protect publishers and authors.

"As a starting point, one potential solution might be the making of provision for the payment of a per-page royalty on photocopies of copyrighted works."

However, a major obstacle in implementing (or even discussing) this solution with the author/publisher groups is that the Association's Special Committee on Copyright does not have "hard" quantitative data on what materials are presently copied by or for special libraries, and in what amounts, and whether the originals are still under valid copyright.

Hence, with the prospect of continuing Congressional activity on the proposed Copyright Revision Bill, the SLA Special Committee on Copyright asks that you complete the enclosed questionnaire for use in preparing a plan of action with the proprietary interests especially (i.e., author/publisher groups). This is not a matter of interest for U.S. members alone. Canadian members should also be concerned on the basis of current Parliamentary interest in revising the Canadian Copyright Law—principally as a consequence of findings by Stuart-Stubbs in *Purchasing and Copying Practices at Canadian University Libraries*, Canadian Library Association, [Ottawa] 1971.

The data you supply may be instrumental in reaching agreement in an area of the copyright law revision controversy that has now spanned a decade.

Because SLA membership records cannot clearly identify multiple employees in any one special library, this letter and questionnaire are mailed to all Members and Associate Members (but not to Student Members, Retired Members and Sustaining Members). All recipients are urged to complete Parts A and B of the questionnaire, but Parts C and D should be completed by only one member of a multiple-member staff library.

We recognize that a substantial number of SLA members may not maintain records to provide an instantaneous reply. We suggest

that a common one-month period (Apr 1–30, 1974) be used for the period of comparison. Hopefully, you can organize your record-keeping operations so that April 1974 can be the common month for report—and that your replies can be mailed no later than May 20, 1974.

The importance of this survey has been increased by the decision handed down by the U.S. Court of Claims in *The Williams & Wilkins vs. The United States* (i.e., National Library of Medicine) on Nov 27, 1973. The court's decision was against Williams & Wilkins by a close majority of 4–3. The decision has been interpreted by experts to cover only a very narrow field. Perhaps, the most important words of the Court are: "... we underline again the need for Congressional treatment of the problems of photocopying." Therefore additional and irrefutable data must be ready for presentation at hearings in the House of Representatives after action by the Senate on the present draft bill S.1361 [93rd Congress; now S.22, 94th Congress].

Failure to respond to this survey may be the last chance that you will have to shape legislation in the interests of efficient service by or for special libraries. If you wish to maintain individual or corporate anonymity, your identity will not be revealed. Please respond with any information that may presently assist this survey. It is not our intent to identify any respondent. We seek only a reporting of facts that can supply an impartial analysis of photoduplication operations in and for special libraries.

Thank you.

SLA Special Committee on Copyright
S. Kirk Cabeen
J. S. Ellenberger, Chairman

SLA Hall of Fame/1976

President Miriam H. Tees has announced the election of two members to the SLA Hall of Fame in 1976 who have made outstanding contributions to the growth and development of the Special Libraries Association at the Association, Chapter, and Division levels.

Phoebe Hayes

Phoebe Hayes, a special librarian all her professional life, was born in Cleveland, Ohio,



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and moved with her family to Spring Green, Wisconsin, as a teenager. She received the BA from the University of Wisconsin at Madison with a library diploma.

She held positions in the Joint Reference Library, Public Administration, Clearing House, Inc. (Chicago); at the Bureau of the Budget (Washington); at American Federation of State, County and Municipal Employees, A.F.L. (Madison, Wisconsin); and at National Farmers Union (Washington and Denver). In 1961 she became director of the Bibliographical Center for Research, Rocky Mountain Region (Denver) where her consuming interest was the promotion of interlibrary cooperation and action. From 1974 she was employed by the Colorado State Library in its Library Development Services.

During these years she did graduate work in the library schools of the University of Wisconsin, University of Chicago, and University of Denver, from which she received her MALS in 1965.

Phoebe Hayes died Sep 24, 1975.

A member of SLA since 1936, she was Social Science Division bulletin editor and served on the committee to revise the Division's Source List of Labor Statistics. She later served as chairman-elect and chairman of the Division. She was active in the Insurance Division as membership chairman, and later became active in the Documentation Division.

An early member of the Colorado Chapter, she served on the Chapter's Constitutional Committee, as bulletin editor and secretary, twice as president, and twice as employment chairman. She was instrumental in publication of the 1970 and 1974 editions of *Special Library Resources in Colorado* and *Guide to Colorado Newspapers, 1865-1965*. She es-

tablished SLA relationships with such groups as Mountain Plains Library Association, New Mexico Library Association, Colorado Library Association, unaffiliated Utah librarians, and ASIS. She helped upgrade the continuing education of area co-workers through joint programs presented at the Colorado-New Mexico SLA-MPLA joint meetings and the Colorado and Rocky Mountain Regional Interlibrary Loan Workshops (1970/74).

At the Association level, she served as a member of the Nominating Committee for three separate terms, including one term as chairman. She was chairman of the committee on SLA/ALA relations, and later became SLA Representative to ALA's Adult and Reference Services Division and its Cooperative Reference Services Committee. She was Conference chairman for the 1963 Annual Conference in Denver, and was a member of the Division Relations Committee. Her service to the Association culminated in a three year term on the SLA Board of Directors (1967/69).

Her contributions locally to the entire library community were numerous and tireless, always directed toward building an interlibrary network in which special libraries and SLA were recognized and promoted.

The quality of leadership displayed by Phoebe Hayes during her 39-year SLA membership was based on a broad humanity, a sharp intellect, an ever present sense of humor, and clarity of perception. She devoted almost 40 years to accepting and doing well every task that professional life could demand of her. For this heritage of professional competence and contributions to the Association, it is fitting that Phoebe Hayes be named to the SLA Hall of Fame Award/1976.

Ruth M. Nielander

Born in Lansing, Iowa, Ruth M. Nielander attended the University of Minnesota where she received the BSLS.

She worked as a supervisor at the Mayo Clinic, Rochester, Minnesota, and later became reference librarian at the National Safety Council in Chicago. In 1951 she became librarian at Lumbermans Mutual Casualty Company in Chicago (now Kemper Insurance Companies) from which position she will retire in 1976. One of her last projects at Kemper was the organization and development of a new and efficient library.

Her contributions to SLA have been at the Chapter, Division and Association levels. She



NIELANDER

is still contributing, and undoubtedly will continue to contribute even after retirement. No matter what the assignment, she always meets her deadlines and often finishes her part well ahead of the deadline.

An active member of the Illinois Chapter, she was Chapter president, chapter consultation officer, and co-author of *Special Libraries: A Guide for Management* (SLA 1966, rev. 1975). This SLA publication, a project of the Illinois Chapter, resulted in the presentation of the SLA Professional Award to the Illinois Chapter in 1966. She was active on many Chapter committees and projects, and in 1975 her history of the Chapter was published in the Chapter bulletin in honor of the Chapter's 50th anniversary.

Her activities extended to the Insurance Division as well. She was Division chairman and later became co-editor of *Sources of Insurance Statistics* (1965) and co-editor of "Insurance Periodicals Index," published monthly in *Best's Review*.

Major Association level activities include service as Chapter Liaison Officer (1956/60), SLA Board of Directors (1965/68) and Nominating Committee chairman (1969/70). Her *Special Libraries* article "The Dollars and Sense of a Company Library" was distributed by SLA for many years as a reprint.

Ruth actively carried the message of special librarianship and SLA by such means as lecturing at seminars in special libraries at Western Michigan University and membership on the University of Illinois School of Library Science Advisory Council.

For all the solid, dependable, analytic qualities which she possesses and which have been instrumental in her contributions to the Association, Ruth M. Nielander is named to the SLA Hall of Fame/1976.

New York Reports

"Legal Aspects of Information: A Janus Seminar" was held at the Roosevelt Hotel in New York City Jan 28, 1976. The seminar was sponsored by the New York Chapter of SLA and the Metropolitan New York Chapter of ASIS. Barbara Ringer, Register of Copyrights, Library of Congress; Michael Harris, Vice-President, John Wiley & Sons, Inc.; and Robert Wedgeworth, Executive Director, ALA, spoke during the morning session on "Copyright—3 Points of View." Ringer summarized the historical background of the Copyright Law, as well as the status of the revision of the Copyright Law now before the U.S. Congress. Harris and Wedgeworth expressed

their views on copyright and its relation to library photocopying.

Three concurrent sessions were held in the afternoon. Stephen M. Daniels, Assistant Minority Counsel to the Government Operations Committee, U.S. House of Representatives, addressed the subject of the Freedom of Information Act. Glyn T. Evans, Director of Library Services, State University of New York, Central Administration, discussed networks, data bases, and information access. Robert Williams, Cohasset Associates, Management Consultants, Specialist in Micrographics, spoke about the legal aspects of microforms.

WASHINGTON LETTER March 10, 1976

Federal Government's Library Policy Includes Special Libraries

The National Commission on Libraries and Information Science has been working for several years now to develop a new national program for the delivery of library and information services to all Americans. The aim of the Commission is to create in due course an integrated nationwide network for the provision of library and information services for all people.

The extent to which the Commission's program can be translated into reality is not yet known, and may not be for many years to come. The question thus arises: What is the existing policy of the U.S. government with respect to library service? Is there a policy at all? If so, how do special libraries fit into the national library policy?

The federal government does indeed have a library policy which includes special libraries. Congress has affirmed that "library and information services adequate to meet the needs of the people of the United States are essential to achieve national goals and to utilize effectively the Nation's education resources. . . ." The federal government has stated as a policy that it "will cooperate with State and local governments and public and private agencies in assuring optimum provision of such services." This statement of policy was adopted in 1970 with enactment into law of the act establishing the National Commission on Libraries and Information Science (PL 91-345).

The federal government also has a specific library program which includes special libraries. Federal grants are provided for the development of cooperative library networks on local, regional, and interstate levels, and these networks are to provide for "the systematic and effective coordination of the resources of school, public, academic, and special libraries and information centers for improved supplementary services for the special clientele served by each type of library or center." This

program of interlibrary cooperation is provided by Title III of the Library Services and Construction Act, a program that has been seriously underfunded since its inception in 1966.

Members of Congress have probably never adequately understood the importance of LSCA Title III, because their constituents by and large have not bothered to tell them about it. The voice of special library users has not been heard, for example, despite the specific mention in the law that special libraries are to be included in LSCA Title III interlibrary networks.

In 1973, LSCA Title III received an annual appropriation of \$7.5 million from Congress. This has been the high-water mark. Since then, the federal funds for LSCA III have hovered around \$2.5 million annually, despite the Title III authorization currently at the level of \$18.2 million. (The authorization represents the ceiling beyond which Congress cannot go in appropriating funds for a program.)

Special libraries in some states have participated in intertype library networks, but in others have received no benefit from LSCA Title III funds. But the law calls for special library participation, and therefore special librarians would do well to study the law (PL 91-600) and the regulations issued by the U.S. Office of Education on LSCA implementation. Contact the state library administrative agency in your state, and ask for a copy of the state's long-range program. Ask for a list of the members of your state's LSCA advisory committee (which by law must be "broadly representative of the public, school, academic, special, and institutional libraries . . ." and their users throughout the state). Be sure the members of the committee are well informed about the special libraries in the state and the unique services they have to offer. And finally, work with other types of libraries in your state to see the Members of Congress understand the importance of funding LSCA Title III at its authorized level.

When the National Commission on Libraries and Information Science completes its new national program, and when elements of this program are finally enacted into law, we may have a much better national library policy and program than we do now. But for the time being, we must make what library legislation we already have work to maximum ability. Without the participation of the special libraries, the federal program of interlibrary cooperation among all types of libraries will not realize its full potential. Without substantially increased federal funding, LSCA Title III can never do the job. Be sure you know how LSCA III funds are being used in your state, and work with your colleagues to see that special libraries are included in your state's LSCA long-range program for improvement and development of all types of library service. Don't wait to be invited to participate. Make your presence known!

Library of Congress

After the great debate about whether or not the new Library of Congress James Madison Memorial Building ought to be converted to office space for members of the House of Representatives, Congress gave up the notion of conversion and voted to make an additional \$33 million available to complete the new library building as originally planned. The outpouring of constituent mail in support of the library helped to turn the tide.

The new Librarian of Congress, Daniel J. Boorstin, is now proposing that the annex building of the Library of Congress be named the Thomas Jefferson Building. Legislation has been introduced in Congress to accomplish the name change, and will probably pass without controversy.

Sara Case
Washington, D.C.

Planning for the 1980 Census: What Are Your Suggestions?

The decennial census is a major national undertaking, and census data are widely used in many important government, private, and community programs. You have an important stake in the decennial census, both as a member of SLA and as an American citizen.

The Census Bureau is now actively working on plans for the 1980 census and important decisions have to be made in the relatively near future. For example, the full content of the basic census questionnaire must be determined by the spring of 1977 so that further preparatory steps can be accomplished successfully.

Although there are many constraints on the census in terms of what and how much information can be collected and tabulated, the Bureau believes that it is very important to obtain and review the recommendations of as wide a range of users and potential users of decennial census data as possible. The Census Bureau is therefore anxious to have your ideas.

If you have any suggestions, questions, or comments on the 1980 census, please send them to: Director, U.S. Bureau of the Census, Washington, D.C. 20233

Errata

The Medical Library Association fellowship offer announced in the February 1976 issue of *Special Libraries* (p.118) was not fully explained. It is available only to foreign individuals who have demonstrated competence in English.

STAFF DEVELOPMENT

Jacobelli, John L. and Jan P. Muczyk / Overlooked Talent Sources and Corporate Strategies for Affirmative Action, Part II. *Personnel Journal* 54(no.11):575-577,587(Nov 1975).

The subject is strategies for affirmative action and both recruitment and development strategies are examined. A guide to federally funded manpower programs is included.

Cowan, John / A Human-Factored Approach to Appraisals. *Personnel* 52(no.6):49-56 (Nov-Dec 1975).

"A computer can be objective" says Cowan, "but a supervisor cannot. . . ." Suggestions for supervisors include both the preparation and the delivery of performance appraisals and emphasize a realistic approach which allows for consideration of the supervisor's own feelings.

Henderson, Richard I. / Job Descriptions—Critical Documents, Versatile Tools, Part 2: Planning for Job Analysis. *Supervisory Management* 20(no.12):15-24(Dec 1975).

The seven steps to successful planning of a job analysis program presented here should be helpful to anyone contemplating the establishment of such a program.

Enell, John W. / The CEU Comes of Age. *Engineering Education* 66(no.2):147-151(Nov 1975).

Who may award CEUs (Continuing Education Units) and what they are awarded for are only two of many questions answered in this article on one of the newest recognition systems. This concept is of personal and professional concern to all of us.

Scobel, Donald N. / Doing Away with the Factory Blues. *Harvard Business Review* 53(no.6):132-142(Nov-Dec 1975).

Are your pages and library assistants of a different social standing or are they just as good as librarians? Whatever your answer, you will find this article an "eye opener" as to the way we (supervisors) treat them (employees).

Newstrom, John W. / Selecting Training Methodologies: A Contingency Approach. *Training and Development Journal* 29(no.10):12-16(Oct 1975).

A most useful article in presenting an alternative to the traditional way of deciding what methods to use in structuring training programs. The author has developed a contin-

gency model consisting of a series of independent and dependent variables placed in a matrix. The independent variables consist of such items as: cost, training objective, time, class size, learning principles, etc. The dependent variables consist of a number of "popular training techniques" such as orientation, lecture, film, role playing, programmed instruction, etc.

Davis, Keith / A Law of Diminishing Returns in Organizational Behavior? *Personnel Journal* 54(no.12):616-619(Dec 1975).

There can be too much of a good thing just as there can be too little. Worker autonomy, employee security, specialization and management's concern for people are examples of how the law of diminishing returns may be applied in an organizational setting.

Altorfer, Otto / Emotional Job Fitness: "The Education of the Heart." *Personnel* 52(no.5):32-37(Sep-Oct 1975).

The emphasis in this article is not on procedural or conceptual training but on teaching interpersonal and communication skills necessary in a work environment. In the organization described, this training was referred to as "education of the heart" or "emotional fitness" training.

Johnson, Ronald D. and Tim O. Peterson / Absenteeism or Attendance: Which Is Industry's Problem? *Personnel Journal* 54(no.11):568-572(Nov 1975).

This article discusses factors which produce absenteeism and outlines a procedure for establishing and maintaining a positive reinforcement program to control it.

Stein, Carrol I. / Objective Management Systems: Two to Five Years After Implementation. *Personnel Journal* 54(no.10):525-528,548(Oct 1975).

Many organizations accept MBO as a way of life; yet a survey of lower- and middle-management personnel conducted in organizations where MBO had been in practice two to five years revealed that only 80% would have voluntarily continued with their MBO programs. Stein summarizes the results of the survey and concludes that inadequate management attention is the overriding weakness.

B.J. Mitchell
California State University, Northridge

COMING EVENTS

May 21-22. Texas Chapter, Special Libraries Association, Meeting and Workshop. . . . Corpus Christi, Texas. Five Sessions will be held at the two-day meeting on a variety of topics. Contact: Stephany Compton (214)620-4268.

Jun 3-4. Executive Workshop in Library Management in Information Services . . . at Executive Tower Inn, Denver, CO. Sponsored by Federal Library Committee, Subcommittee on Education. Open to federal, state, municipal government librarians. For information: James Riley, Federal Library Committee, Library of Congress, Washington, D.C. 20540.

Jun 15. IEEE Computer Conference Abstracts due. The topic of the conference, to be held Nov 17 in Gaithersburg, Md., is Computer Networks: Trends and Application. Write: Dr. Patrick McGregor, Network Analysis Corp., 9105 Westerholm Way, Vienna, Va. 22180.

Jun 23-24. Information Demand and Supply for the 1980's, symposium . . . Washington, D.C. Sponsor: International Council of Scientific Unions/Abstracting Board. Write: Secretary General, ICSU/AB, 17 Rue Mirabeau, 75016-Paris, France.

Jun 28-Jul 1. International Codata Conference, 5th Biennial . . . Boulder, Colo. In the Western Hemisphere and Japan, Write to Dr. H. Van Olphen, National Academy of Sciences, 2101 Constitution Ave., N.W., Washington, D.C. 20418, U.S.A. Others contact: CODATA Secretariat, 51 Boulevard de Montmorency, 75016 Paris, France.

Jun 29-30. National Micrographics Association, Computer Image Processing Division Seminar . . . Le Baron, Dallas, Texas.

Jul 17. COLT Conference . . . Chicago. Topic: The work roles of nonprofessionals and professionals. Write: Margaret Barron, Cuyahoga Community College, 3900 Community College Avenue, Cleveland, Ohio 44105.

Jul 26-28. 11th Annual Educational Media and Technology Conference . . . University of Wisconsin-Stout, Menomonie, Wis. Keynote Speakers: Barbara Ringer, "The New Copyright Law;" Harold Hill "How to Survive in the Media Business." Write: Dr. David P. Barnard, Dean of Learning Resources, UW-Stout, Menomonie, Wis. 54751.

Aug 1-7. Executive Development Program for Library Administrators . . . Miami University, Oxford, Ohio. Contact: Dr. Charles E. Watson, School of Business Administration, Miami University, Oxford, Ohio 45056.

Aug 3-8. International Association of Orientalist Librarians, Library Seminars . . . Mexico City. Contact: Geoffrey E. Marrison, IAOL Secretary-Treasurer, c/o The British Library, Great Russell St., London WC1B 3DG, England.

Aug 9-30. Archives Study Tour . . . Athens, Cairo, Amman, Jerusalem, Bethlehem, Tel-Aviv, Istanbul, Rome. Write: Virginia Ballengee, 103 6th Street N.E., Washington, D.C. 20002.

Aug 15-21. International Association of Music Libraries, Annual Meeting . . . Bergen, Norway. Contact: Ella Arnsten, Norsk Rikskringkasting, Bjørnstjerne Bjørnsons plass 1, Oslo 3, Norway.

REVIEWS

Changing Patterns in Information Retrieval; Tenth Annual National Information Retrieval Colloquium, May 3-4, 1973, Philadelphia, edited by Carol Fenichel. Washington, D.C., American Society for Information Science, 1974. 175 p. \$15.00.

This set of papers reminds me of the ASIS *Annual Review of Information Science and Technology*. The same subject areas seem to be covered in both books. If I were forced to make a choice between these two books, I would have to choose the *Annual Review*.

There are four state-of-the-art papers in this book which review the topics: 1) user behavior, 2) strategies for organizing and searching, 3) technology for storage and retrieval of bibliographic data, and 4) information as a product. Just as in the *Annual Review*, the authors overlap a little more than I think is necessary.

One of the aspects of this book concerns the conference as the tenth meeting. There is a tendency to look back to the state of the art in the early 1960s. It was obvious to the authors that over the last ten years there has been progress and change. The progress in the art of making and using computers has been the

major force behind most of the changes the authors mention; it is my opinion that the major change in librarianship over the last ten years has indeed centered in the use of the computer and the improvements in the speed and storage capability of the computer. Ten years ago, on-line applications were dreams. Now they are common.

I do believe that this is a useful addition to the literature on information retrieval. If you are unaware of the activities which are developing in information retrieval, I can recommend this book as a good place to learn about them.

**Masse Bloomfield
Hughes Aircraft Company
Culver City, Calif. 90230**

Who's Who in the United Nations and Related Agencies. New York, Arno Press, a New York Times Company, 1975. xxxiii, 785p.

It is surprising that it would have taken 24 years for a new edition of *Who's Who in the United Nations* to be published. It is a welcome addition to the *Who's Who* family, and it is hoped that it will not take another quarter of a century for the next edition to appear. As the title indicates the related agencies have also been included, as is to be expected.

This present volume was produced under the direction of Dr. Andrew W. Cordier as chairman. The Advisory Panel designated the following general categories of persons for inclusion: a) Secretariat staff members holding the rank of P-5 (Section Chief) and above, or corresponding grades, including senior officers of military contingents and the holders of key posts in the field; b) In New York and Geneva, members of Permanent Missions to the UN, holding the rank of Counsellor and above, including those of Observer States; c) Members of Executive Boards, Governing Councils or similar bodies; d) Members of the International Court of Justice; e) Members or Representatives on major Commissions or Committees of the UN system; f) Retired living members of the Secretariats who held very senior posts at the time of their retirement; g) Living Presidents of the UN General Assembly; h) Officers and Past Presidents of UN media correspondents' associations in New York (UNCA) and in Geneva (ACANU); i) Principal officials of the World Federation of UN Associations; j) Representatives of the principal categories of Non-Governmental Or-

ganizations accredited to the United Nations, as selected by the UN Economic and Social Council and the UN Secretary-General.

The types of information, always in the same sequence, are as follows: Name, position or title, business address, nationality, language spoken, date and place of birth, marital status, career positions, education, professional interests, publications, awards of honors, vocational interest, residence address and telephone number.

There is a great deal of unexpected and useful information following the main biographical section:

An Organizational roster of the United Nations, The International Court of Justice, The Common Organs of the United Nations System, The Specialized Agencies, The International Atomic Energy Agency and the General Agreement on Tariffs and Trade.

United Nations Installations around the World arranged alphabetically by country giving the name of the Offices with their mailing address, street address, cable address, telephone, and if available telex number. Here one finds the addresses of headquarters by country, with a separate key preceding the section. It would have been more convenient to have them listed in the organizational roster.

A listing of the Member States of the United Nations as of December 1974 follows, giving the name of the member, the official language(s), the name in the official language(s), and the date of admission. This is followed with address and telephone number of the Permanent Missions to Headquarters in New York and in Geneva, as well as those of the Permanent Observers of Non-Member States at UN Headquarters.

We also find an historical directory of the Presidents of the United Nations General Assembly, 1946-1974 and of the Principal Officials of the United Nations and the related Agencies, also 1946-1974. A listing of Depository Libraries around the World with their addresses, is followed by a directory of the World Federation of United Nations Associations as well as of the Member United Nations Associations, giving chief officers and addresses.

An appendix contains the United Nations Budget for 1974-1975, and an index to the Biographical Section by Nationality concludes the volume.

A very useful volume both for the small as well as for the large library, it brings together a great deal of information in one place.

Any biographical directory is partly out of date by the time it is published. And so, of course, is this. For example, Cordier has died

since this volume was published; a successor has probably been found for U Thant who was President of the World Federation of United Nations Associations at the time of his death. Other changes have surely taken place and will take place in the future.

Alice E. Plowitz
Economic & Public Affairs Division
New York Public Library
New York, New York

Simulation Teaching of Library Administration,
by Martha Jane K. Zachert. New York, R.R.
Bowker, 1975. p.297. \$18.95

As any systematic reader of *Special Libraries* will note, neither Zachert nor simulation teaching are new topics for this periodical [see *SL* 63:545-548 (Dec 1972) and *SL* 64:362-369 (Sep 1973)]. In this book length treatment of the marriage of the simulation method of instruction to library administration, Zachert provides a rationale case for and a lucid explanation of this field-tested methodology and its applications to library administration courses. In her own words, "This book is offered as a practical manual to teachers of library science administration in Master's programs and advanced classrooms and in a variety of continuing education formats. . . ."

In a series of well written chapters, the author introduces simulation teaching, explains the role of the instructor, and expands on several techniques—role play, in basket exercises, games, etc.—which can be used with

this teaching method. Zachert also supplies a selected bibliography and two complete "simulation examples," an Industrial Model Library (the Double XYZ Oil Company) and a governmental library simulation (A Federal Library Model). The former model is offered after a decade of classroom testing and the latter after its successful application to a continuing education course for post Master's, working federal librarians. While offering these two models, Zachert notes the need for the creation of more of these learning materials and calls for a research effort to gain valid descriptions of field situations and processes for model development.

Two messages are delivered by this volume. The first is that the simulation method of instruction is a viable alternative to the textbook, lecture, and group discussion method of teaching library administration. The second is that simulation instruction offers the student learning experiences which are as real as possible in a classroom at low risk while allowing the student high involvement in problem solving and in the learning process itself. As a user of this instructional methodology in my own course in Special Library Administration at Simmons, I am convinced Dr. Zachert is correct on both counts. For those not yet convinced or not familiar with this teaching methodology, this book is a must. Indeed, for all who teach and for those who aspire to teach administration courses to librarians and to students of librarianship, this volume is a highly recommended purchase.

James M. Matarazzo
Simmons College
School of Library Science
Boston, Mass. 02115

Specialist Publications on Many Subjects Being Shown by British Exhibitors

In an age of ever increasing technology and of new industries operating alongside old ones, communication plays a vital part in ensuring the continual distribution of new ideas and practical knowledge. British organizations at the Special Libraries Association conference in Denver, Jun 6-9, 1976, will demonstrate their abilities in this direction with a wide selection of publications ranging in subject matter from civil engineering to a history of comics.

The British Hydromechanics Research Association will show examples of its abstract journals which are the result of collecting and processing information from worldwide sources.

A significant part of European physics literature is published by the Institute of Physics. Publications are available in six main categories: Professional magazines, research and review journals, back issues, microform publications, books, and charts and nets for X-ray crystallography.

Also offering an extensive range of publications is the Chemical Society which has several new titles on its lists including "Photo Chemistry" vol. 6 and "Photo-Effects in Absorbed Species."

The Institution of Electrical Engineers has long been an important publisher of primary periodicals and conference publications in the fields of science and engineering. Proceedings of the IEE are published in the form of a monthly periodical.

Four institutes and 10 bureaux comprise the Commonwealth Agricultural Bureaux which

will be promoting its 20 abstract journals which have a monthly circulation of 30,000 in 150 countries.

A wide selection of journals, books, indexes and microfiche will be shown by the Biochemical Society. Titles include "Annals of Applied Biology" and "Nitrogen Metabolism in Plants."

Both books and magazines are offered by the Institution of Civil Engineers, under such categories as structures and buildings, hydrology, hydraulics and public health, soil mechanics and foundations and transportation.

Mansell Information/Publishing Ltd., will promote, among other publications, the National Union Catalog, pre-1956 imprints. It includes forms of books, pamphlets, atlases, music and periodicals and serials which began publication before 1956. Holdings of more than 1,000 North American libraries are represented. It is Mansell also which has produced the British Comic Catalogue, 1874-1974, which lists some 2,000 titles and provides a record of the history and development of this popular medium.

A great many books and magazines are published by the Metals Society, as well as monthly and quarterly magazines. Of particular interest is "Ironmaking and Steelmaking" which is published in association with the American Society for Metals.

The Institution of Mechanical Engineers will exhibit a collection of journals and books in its own and allied fields.

PUBS

(76-035) **Acronyms and Initialisms of Library Networks.** 2d version. Stanford, Calif., ERIC Clearinghouse on Information Resources, 1975. 14p. \$1.50.

Entries include acronym, name, and address. Some citations for further information are given. Available from: Box E, School of Education, Stanford University, Stanford, Calif. 94305.

(76-036) **Standards and Specifications for Alberta Government Special Libraries.** Alberta Government Libraries' Council. Edmonton, Alberta, Canada, Queen's Printer, 1975. 16 p. \$3.00.

Available from: Publications & Statutes, Queen's Printer, 11510 Kingsway Ave., Edmonton, Alberta, Canada T5K 2G6.

(76-037) **Reader in Library Systems Analysis.** Lubans, John and Edward A. Chapman, eds. Englewood, Colo., Microcard Editions Books, 1975. 471p. \$18.95. LC 75-6253 ISBN 0-910972-45-1

Collection of reprinted articles regarding the history and development of library systems analysis.

(76-038) **Directory of Library Science Libraries, 1975.** Nielsen, Carol S. and Kathryn Hall, comps. Chicago, American Library Assn. Library Education Division, 1975. 49p. \$1.00.

Directory covers 35 library school libraries. Available from: Library Education Division, ALA, 50 E. Huron St., Chicago, Ill. 60611.

(76-039) **Directory of Historical Societies and Agencies in the United States and Canada.** 10th ed. McDonald, Donna, ed. Nashville, Tenn., American Assn. for State and Local History, c1975. 434p. \$20.00 (\$15.00 AASLH members). LC 56-4164 ISBN 910050-15-5

Geographical arrangement. Includes general and special interest indexes. Available from: AASLH, 1400 Eighth Ave. So., Nashville, Tenn. 37203.

(76-040) **Data Bases in Europe: A Directory to Machine-Readable Data Bases and Data Banks in Europe.** Pratt, Gordon, ed. London, Aslib, c1975. (European User Series No. 1). 66p. SBN 85142-076-1

Index of data bases and data banks, operators and originators. Lists of acronyms and published sources included.

(76-041) **A Selective Annotated Bibliography on Library Networks.** Stanford, Calif., ERIC Clearinghouse on Information Resources, 1975. unpagged. \$1.50.

Lists more than 150 citations, some annotated. Available from: Box E, School of Education, Stanford University, Stanford, Calif. 94305.

(76-042) **The New Library Key.** 3d ed. Cook, Margaret G. New York, H. W. Wilson, 1975. 264p. \$5.00. LC 75-11754 ISBN 0-8242-0541-3

Introduction to the use of the library and annotated lists of reference books.

(76-043) **Foreign Affairs Bibliography: A Selected and Annotated List of Books on International Relations, 1962-1972.** Kreslins, Janis A. New York, R. R. Bowker, 1976. 921p. \$42.50. LC 75-29085 ISBN 0-8352-0784-6

Subject arrangement, with author index. Published for the Council on Foreign Relations.

(76-044) **Computerized Networks Among Libraries and Universities: An Administrator's Overview.** Mayhew, Lewis B. Stanford, Calif., ERIC Clearinghouse on Information Resources, 1975. 73p. \$3.00.

After presenting some examples of networks, the development, current issues, and future of networks are discussed. Available from: Box E, School of Education, Stanford University, Stanford, Calif. 94305.

(76-045) **Reader in Library Technology.** Adamovich, Shirley Gray, ed. Englewood, Colo., Microcard Editions Books, 1975. 236p. \$18.95. LC 75-8051 ISBN 0-910972-52-4

Collection of reprinted articles about library technical assistants.

(76-046) **Specialised Information Centres.** Harvey, Joan M. Hamden, Conn., Linnet Books, c1976. 112p. \$7.50. LC 75-22152 ISBN 0-208-01521-3

Looks at the administration of and the dissemination of information in special libraries. Examples are given of libraries in Great Britain and the United States.

(76-047) **Use of Management and Business Literature.** Vernon, K.D.C., ed. Boston, Butterworths, c1975. 327p. ISBN 0-408-70690-2

Guide to sources of information.

(76-048) **Policies of Publishers: A Handbook for Order Librarians.** Kim, Ung Chon. Metuchen, N.J., Scarecrow, 1976. 132p. \$7.50. LC 75-33629 ISBN 0-8108-0882-X

Entries include address and telephone number, order address, and information about prepayment requirement, discount policy, return policy, shipping and billing policy, back order policy, and standing order/approval plans.

New Books

Astrophysics and Space Science Library

53. The Solar Chromosphere and Corona

Quiet Sun
by R. Grant Athay
1976. xii + 504 pp. Cloth Dfl. 150.- / US \$59.00

55. Solid State Astrophysics

Proceedings of a Symposium on Solid State Astrophysics held at the University College, Cardiff, July 1974
edited by Nalin Chandra Wickramasinghe and D. J. Morgan
1976. xii + 302 pp. Cloth Dfl. 95.- / US \$37.00

57. The Scientific Satellite Programme during the International Magnetospheric Study

Proceedings of the 10th ESLAB Symposium held at Vienna, Austria, 10-13 June 1975
edited by K. Knott and B. Baltrick
1976. xv + 464 pp. Cloth Dfl. 113.- / US \$39.50

Boston Studies in the Philosophy of Science

18. Philosophical Problems of Modern Physics

by Peter Mittelstaedt
1976. ix + 207 pp. Cloth Dfl. 50.- / US \$18.50
Paper Dfl. 33.- / US \$11.00

27. Topics in the Philosophy of Biology

edited by Marjorie Grene and Everett Mendelsohn
1976. xiii + 454 pp. Cloth Dfl. 110.- / US \$39.50
Paper Dfl. 55.- / US \$19.50

33. Science and its Public: The Changing Relationship

edited by Gerald Holton and William Blomquist
1976. xxv + 288 pp. Cloth Dfl. 70.- / US \$26.00
Paper Dfl. 33.- / US \$11.00

43. Language in Focus: Foundations, Methods and Systems

edited by Asa Kasher
1976. 679 pp. Cloth Dfl. 165.- / US \$64.00
Paper Dfl. 85.- / US \$29.00

Geophysics and Astrophysics Monographs

8. Solar Flares

by Zdeněk Švestka
1976. xv + 273 pp. Cloth Dfl. 115.- / US \$39.50
Paper Dfl. 60.- / US \$23.00

Homogeneous Catalysis in Organic and Inorganic Chemistry

1. Homogeneous Hydrogenation in Organic Chemistry

by F. J. McQuillin
1976. viii + 133 pp. Cloth Dfl. 50.- / US \$19.50

International Studies Series in Economics and Econometrics

8. Economic Planning Studies; Ragnar Frisch's Memorial Essays

A Nobel Prize in Economics Contribution
edited by Frank Long
1976. xv + 200 pp. Cloth Dfl. 58.- / US \$19.50

The Jerusalem Symposia on Quantum Chemistry and Biochemistry

8. Environmental Effects on Molecular Structure and Properties

edited by Bernard Pullman
1976. xi + 588 pp. Cloth Dfl. 195.- / US \$75.00

Mathematical Physics and Applied Mathematics

1. Quantum Mechanics, Determinism, Causality, and Particles

An International Collection of Contributions in Honour of Louis de Broglie on the Occasion of the Jubilee of his Celebrated Thesis
edited by M. Flato, Z. Maric, A. Milojevic, D. Sternheimer and J. P. Vigiier
1976. x + 250 pp. Cloth Dfl. 80.- / US \$29.00

NATO Advanced Study Institutes Series C. Mathematical and Physical Sciences

23. Renormalization Theory

edited by G. Velo and A. S. Wightman
1976. vii + 482 pp. Cloth Dfl. 110.- / US \$39.50

25. Electrode Processes in Solid State Ionics

edited by M. Kleitz and J. Dupuy
1976. xiv + 466 pp. Cloth Dfl. 100.- / US \$39.50

26. Long-Time Predictions in Dynamics

edited by V. Szebehely and B. D. Tapley
1976. xv + 358 pp. Cloth Dfl. 85.- / US \$33.00

Sovietica

36. Marxism and Religion in Eastern Europe

Papers presented at the Banff International Slavic Conference, September 4-7, 1974
edited by Richard T. De George and James P. Scanlan
1976. xvi + 181 pp. Cloth Dfl. 70.- / US \$27.00

Synthese Library

72. Essays on Explanation and Understanding

Studies in the Foundations of Humanities and Social Sciences
edited by Juha Manninen and Raimo Tuomela
1976. vii + 440 pp. Cloth Dfl. 145.- / US \$56.00

78. Logic and Probability in Quantum Mechanics

edited by Patrick Suppes
1976. xii + 521 pp. Cloth Dfl. 110.- / US \$39.50

81. Can Theories be Refuted?

Essays on the Duhem-Quine Thesis
edited by Sandra G. Harding
1976. xxi + 316 pp. Cloth Dfl. 110.- / US \$39.50
Paper Dfl. 48.- / US \$18.00

93. Local Induction

edited by Radu J. Bogdan
1976. xiv + 340 pp. Cloth Dfl. 110.- / US \$39.50

94. Understanding and Prediction

Essays in the Methodology of Social and Behavioral Sciences
by Stefan Nowak
1976. x + 524 pp. Cloth Dfl. 150.- / US \$60

Vienna Circle Collection

3. Ernst Mach: Knowledge and Error

Sketches on the Psychology of Enquiry
Erkenntnis und Irrtum. Leipzig, 1905
1976. xxxviii + 393 pp. Cloth Dfl. 135.- / US \$52.00
Paper Dfl. 75.- / US \$29.00

Western Ontario Series

6. Foundations of Probability Theory, Statistical Inference and Statistical Theories of Science

Proceedings of an International Colloquium, The University of Western Ontario, May 1973
edited by W. L. Harper and C. A. Hooker
1976. xxxvi + 1004 pp. Cloth Dfl. 280.- / US \$105.00
Set of 3 volumes. Paper Dfl. 150.- / US \$ 60.00

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An open letter to all Community & Jr. College Library Directors, & Presidents

A no nonsense approach to library economics

RECOGNIZE THIS

Budgets are shrinking. The budgets required to run every library are faced with continual cutbacks. It's the old story. And because of your position, you are aware of this. The economics of running a library have become a number one priority.

SPACE IS AT A PREMIUM

Those of you with old buildings have been wrestling with cramped space for years. Those lucky enough to have new buildings know the demands already being made on that new space. It is almost impossible to keep up with that demand.

VANDALISM IS GROWING

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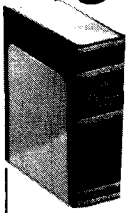
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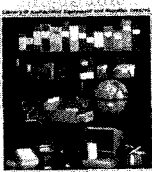
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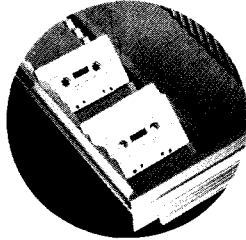
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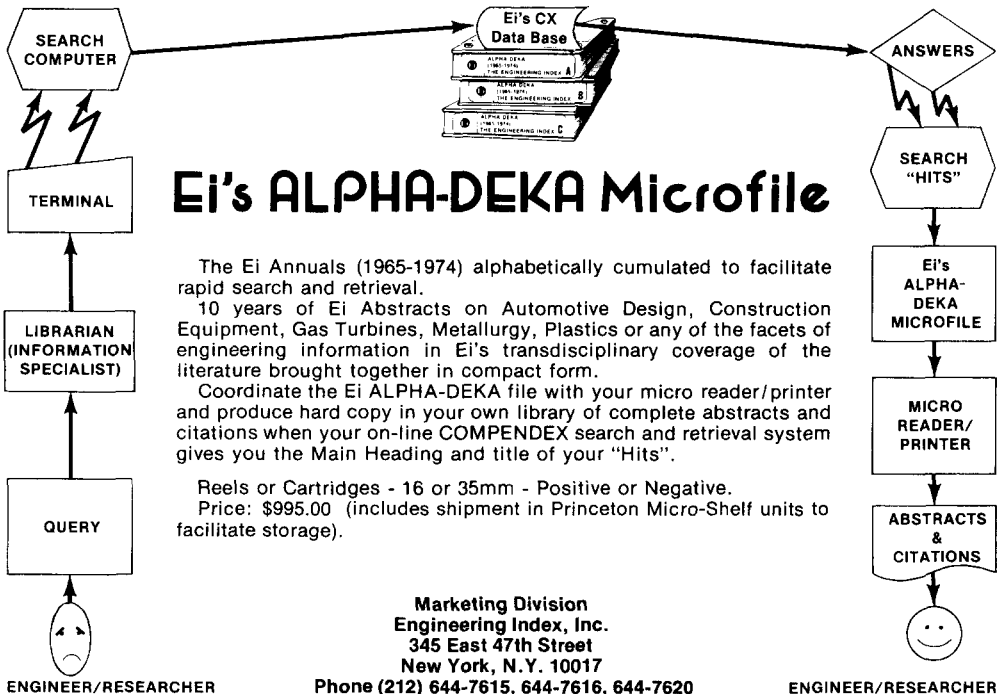
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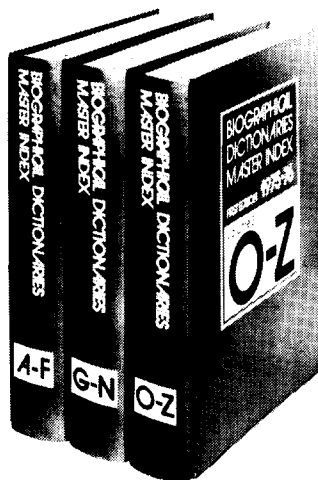
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